

Clustering

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In these exercises, you will continue to work with the Arabidopsis ST vs. HT RNAseq dataset. First, you will select a subset of the data and inspect it; then cluster the data using hierarchical clustering and K-means clustering; and finally inspect one of the clusters you found for enriched functional annotations.

Data selection, visualisation and exploration

Start RStudio, and load the CSV data file you used earlier:

```
counts =  
read.table("http://www.bioinformatics.nl/courses/RNAseq/ST_vs_HT.csv",  
sep="," , row.names=1, header=TRUE, stringsAsFactors=FALSE)
```

Next, try to select a number of interesting genes, e.g. `ngenes = 1000`:

```
# Calculate MAD for each gene  
m = apply(counts,1,mad)  
# Sort genes by decreasing MAD  
ind = order(m,decreasing = TRUE,na.last = NA)  
data = counts[ind[1:ngenes],]
```

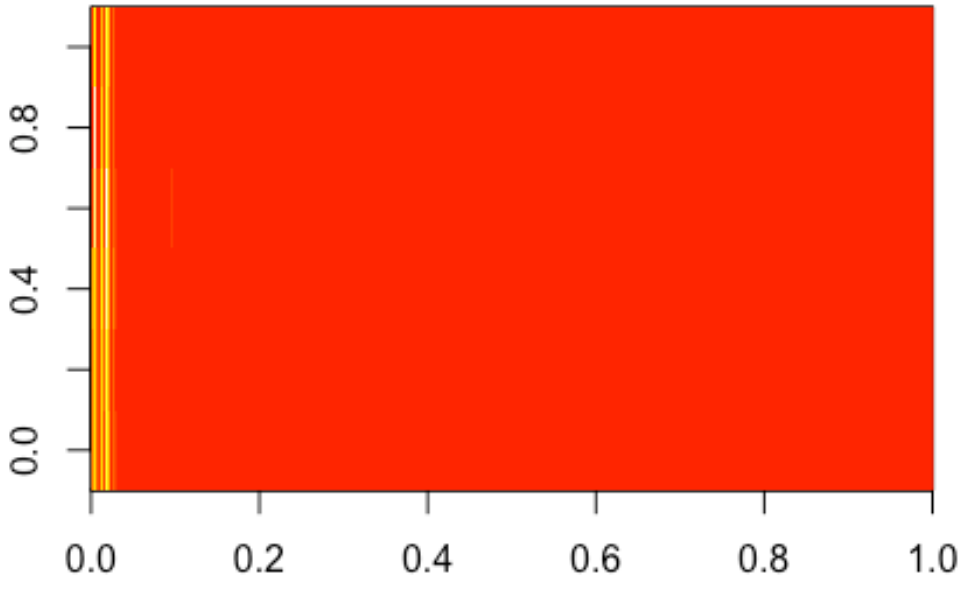
Can you find out what definition of “interesting” is used here? (hint: `help(mad)`).

Now inspect the data. First, convert the data into a matrix:

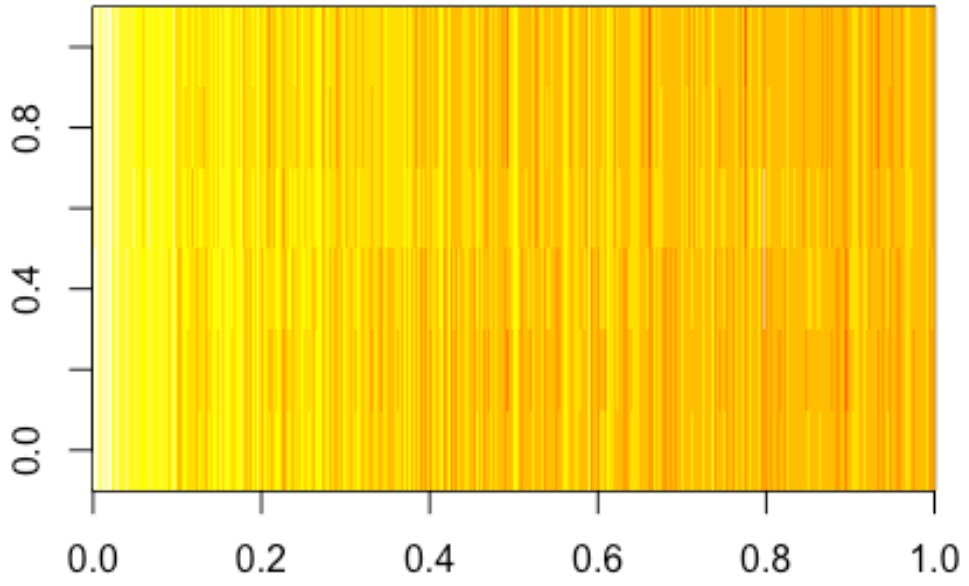
```
dm = as.matrix(data)
```

Then try one or more of the following:

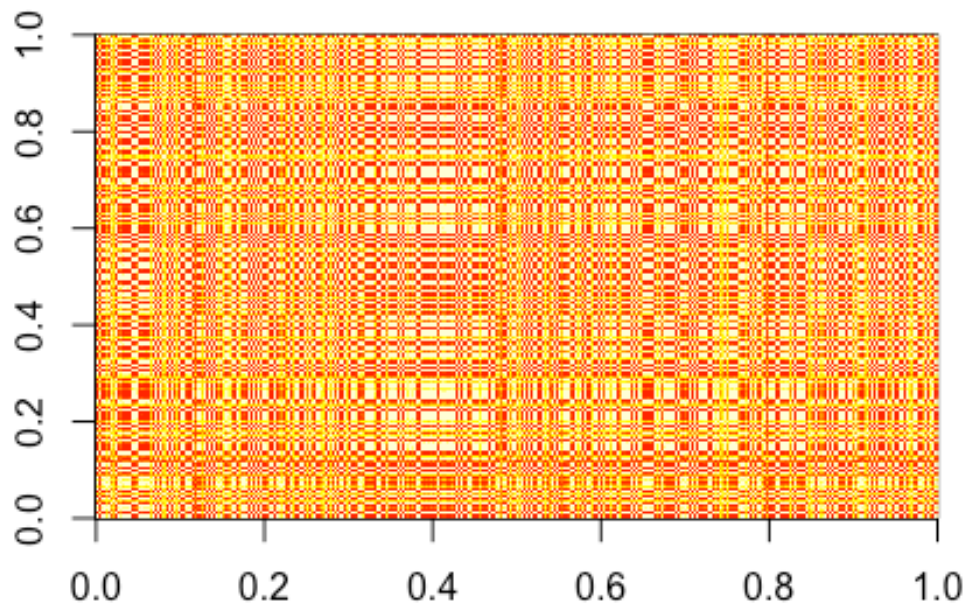
```
image(dm)
```



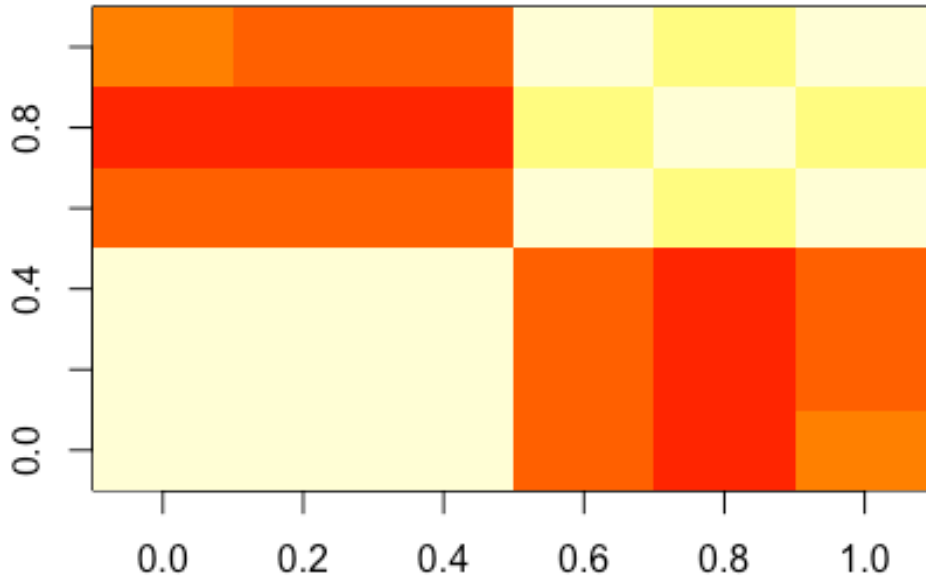
`image(log(dm))`



```
image(cor(t(dm)))
```



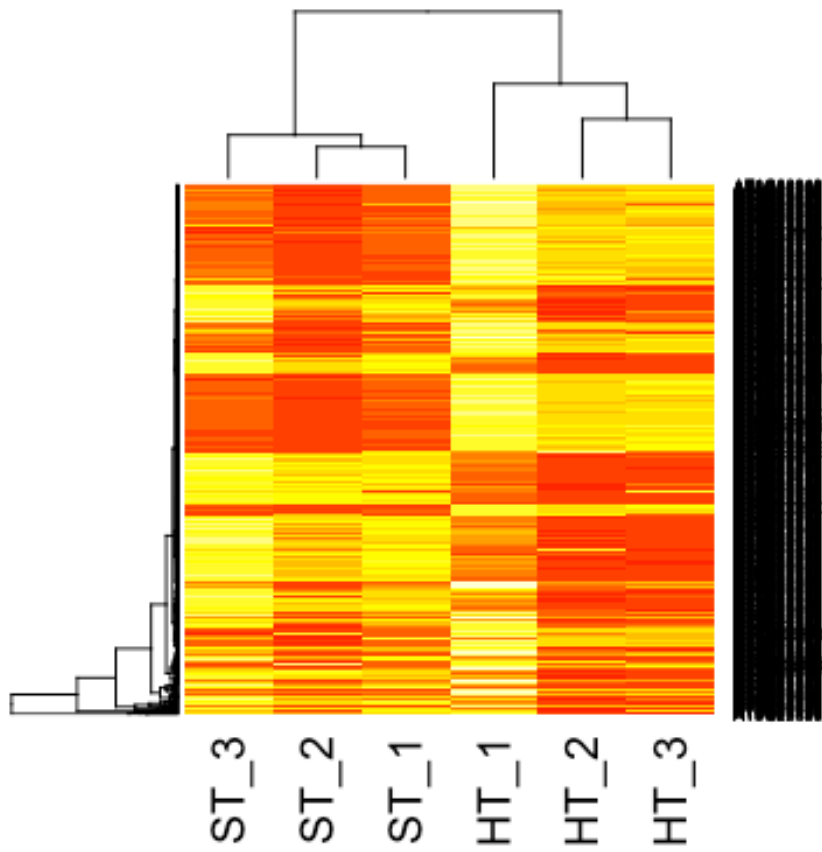
```
image(cor(dm))
```



Note that `t()` transposes the data matrix, allowing you to select genes resp. samples as columns. What do you notice in the figures?

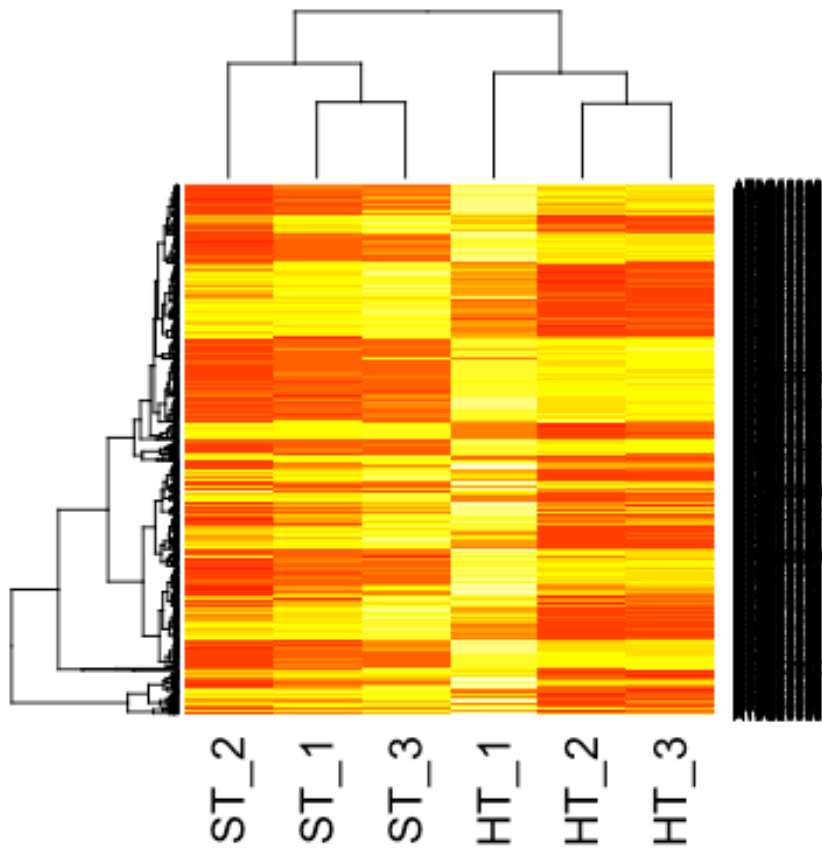
You can also create a heatmap, using

```
heatmap(dm)
```



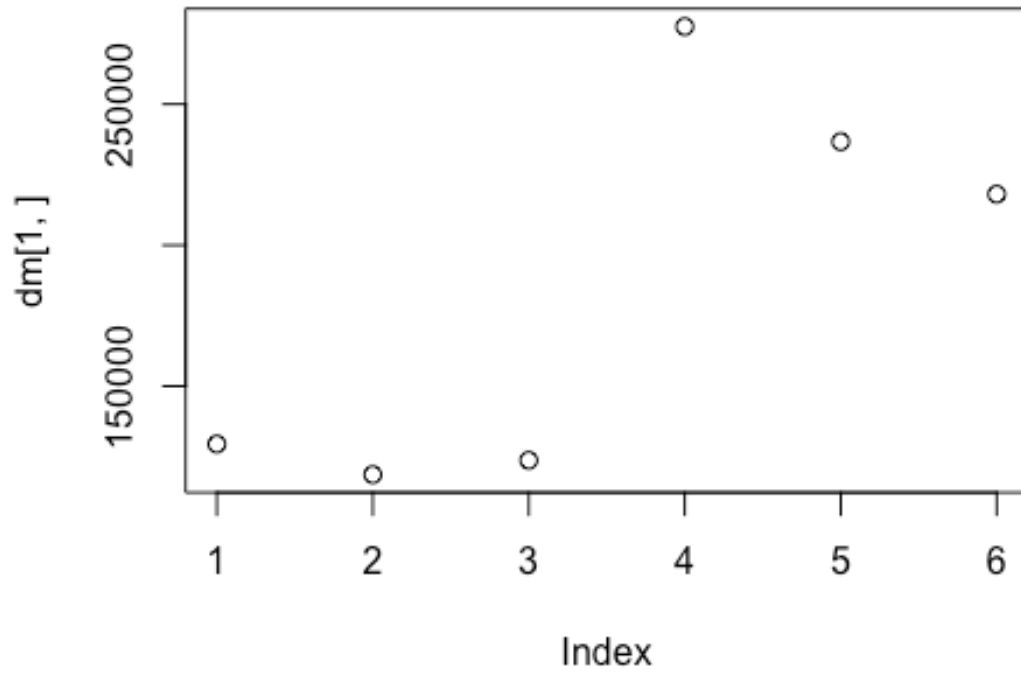
What does this tell you about the genes you selected? Compare the output to

```
heatmap(log(dm+1))
```

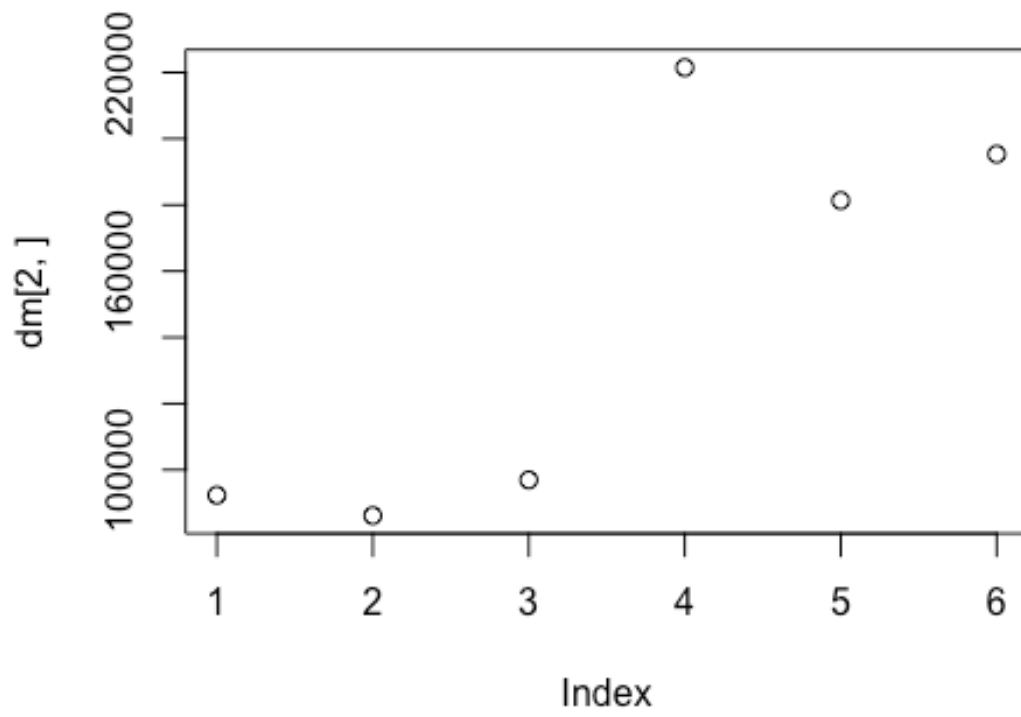


You can inspect some gene profiles, e.g.

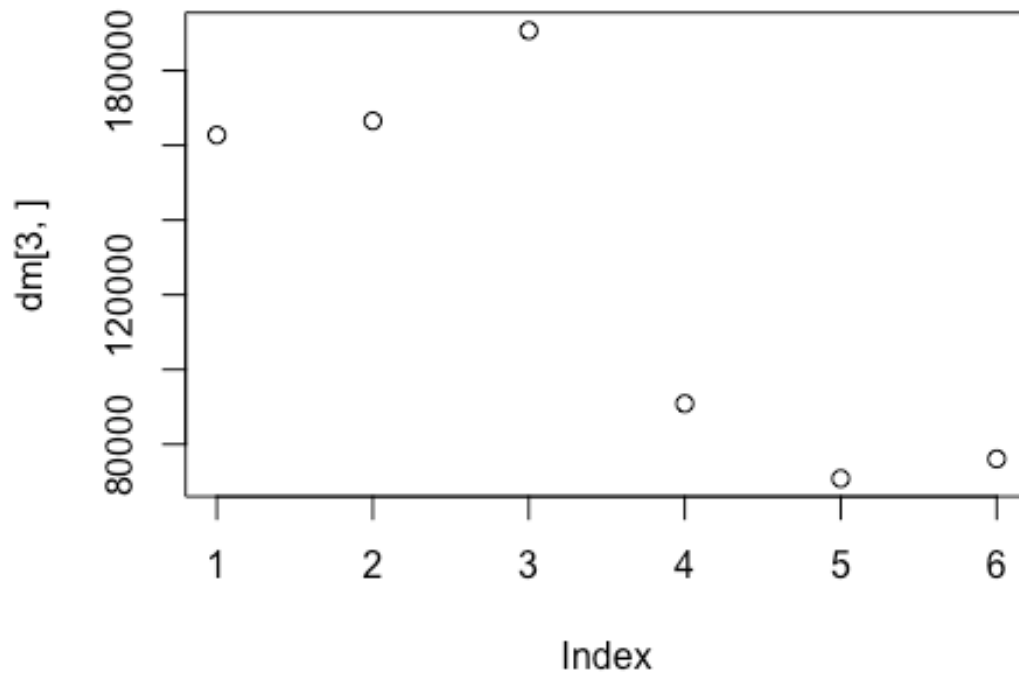
```
plot(dm[1,])
```



```
plot(dm[2,])
```

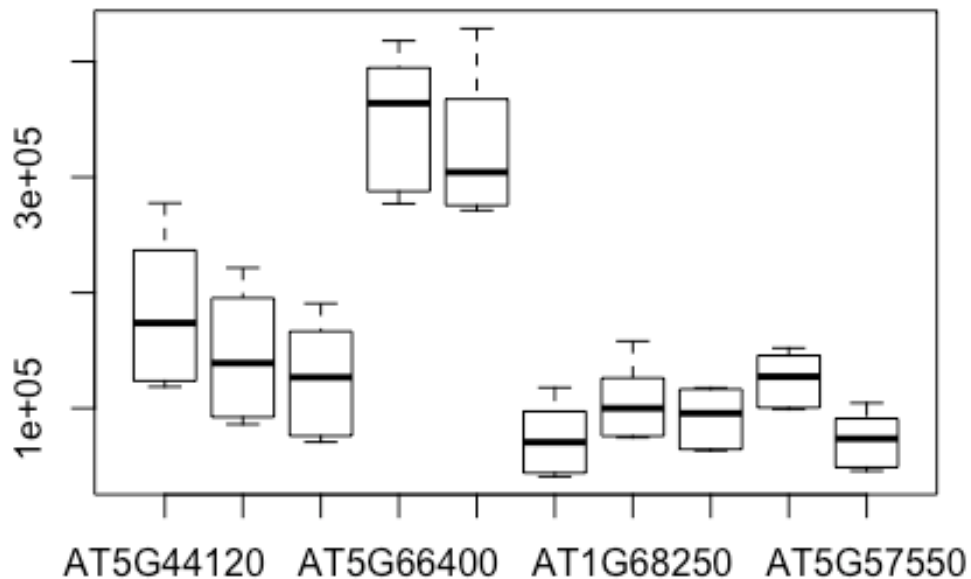



```
plot(dm[3,])
```



or the expression ranges of some genes, for example using

```
boxplot(t(dm[1:10,]))
```



Next, you can perform a principal component analysis on the *samples*, using

```
p <- prcomp(t(data))
summary(p)

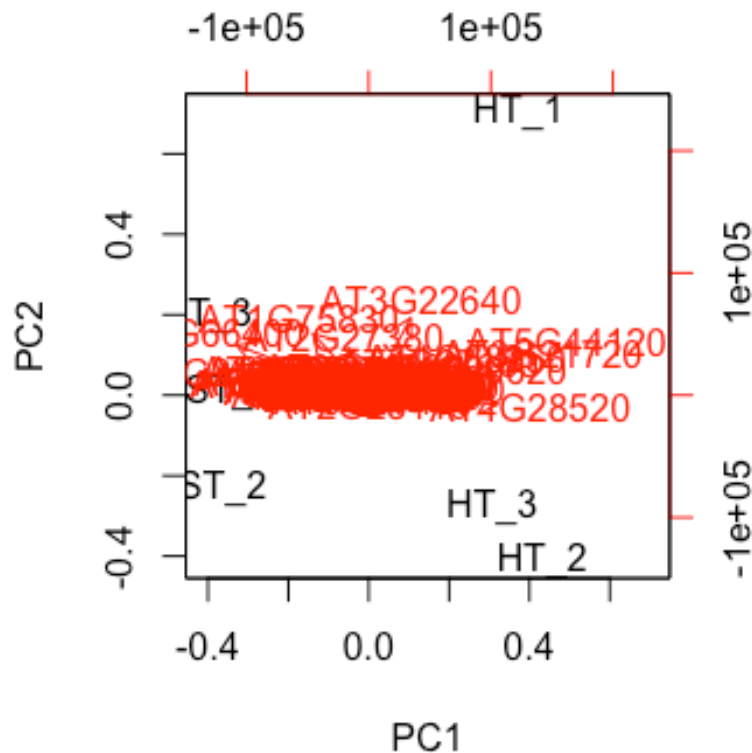
## Importance of components:
##              PC1      PC2      PC3      PC4      PC5
## Standard deviation  1.605e+05  6.849e+04  3.620e+04  1.578e+04  1.45e+04
## Proportion of Variance  7.995e-01  1.456e-01  4.065e-02  7.730e-03  6.52e-03
## Cumulative Proportion  7.995e-01  9.451e-01  9.858e-01  9.935e-01  1.00e+00
##              PC6
## Standard deviation   5.546e-11
## Proportion of Variance  0.000e+00
## Cumulative Proportion  1.000e+00
```

How much variance is explained by the first principal component? If you plot the samples on the principal components, using

```
biplot(p)

## Warning in arrows(0, 0, y[, 1L] * 0.8, y[, 2L] * 0.8, col = col[2L],
length
## = arrow.len): zero-length arrow is of indeterminate angle and so skipped
```

```
## Warning in arrows(0, 0, y[, 1L] * 0.8, y[, 2L] * 0.8, col = col[2L],
length
## = arrow.len): zero-length arrow is of indeterminate angle and so skipped
```



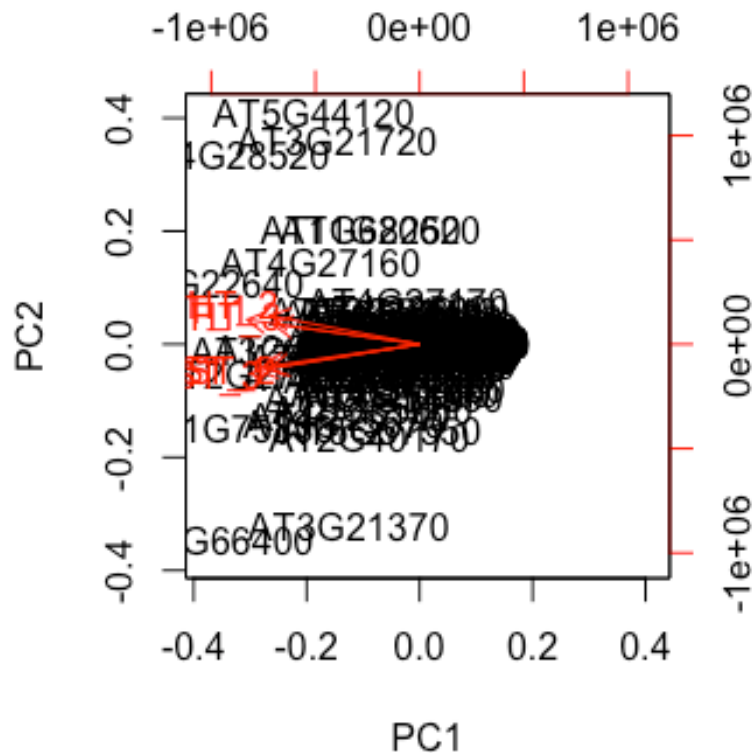
What does it look like the first component corresponds to? Note that the black items are the points (samples) projected on the first two principal components, and the red arrows indicate what combinations of original dimensions (genes) lead to the principal components.

Similarly, you can perform a principal component analysis on the *genes*, using

```
p <- prcomp(data)
summary(p)

## Importance of components:
##              PC1      PC2      PC3      PC4      PC5
## Standard deviation  7.264e+04 1.136e+04 2.981e+03 1.498e+03 1030.4089
## Proportion of Variance 9.738e-01 2.380e-02 1.640e-03 4.100e-04 0.0002
## Cumulative Proportion 9.738e-01 9.976e-01 9.993e-01 9.997e-01 0.9999
##              PC6
## Standard deviation   819.93564
## Proportion of Variance 0.00012
## Cumulative Proportion 1.00000
```

biplot(p)



Can you spot “outlying” genes in the biplot? Make a plot of their values to inspect the expression values.

Optional

You can also inspect the data (both genes and samples) using t-SNE. You will need to install and use the library first (`install.packages(“tsne”)`), then

```
library(tsne)
t <- tsne(t(data), perplexity=1); plot(t); text(t, labels=colnames(data))

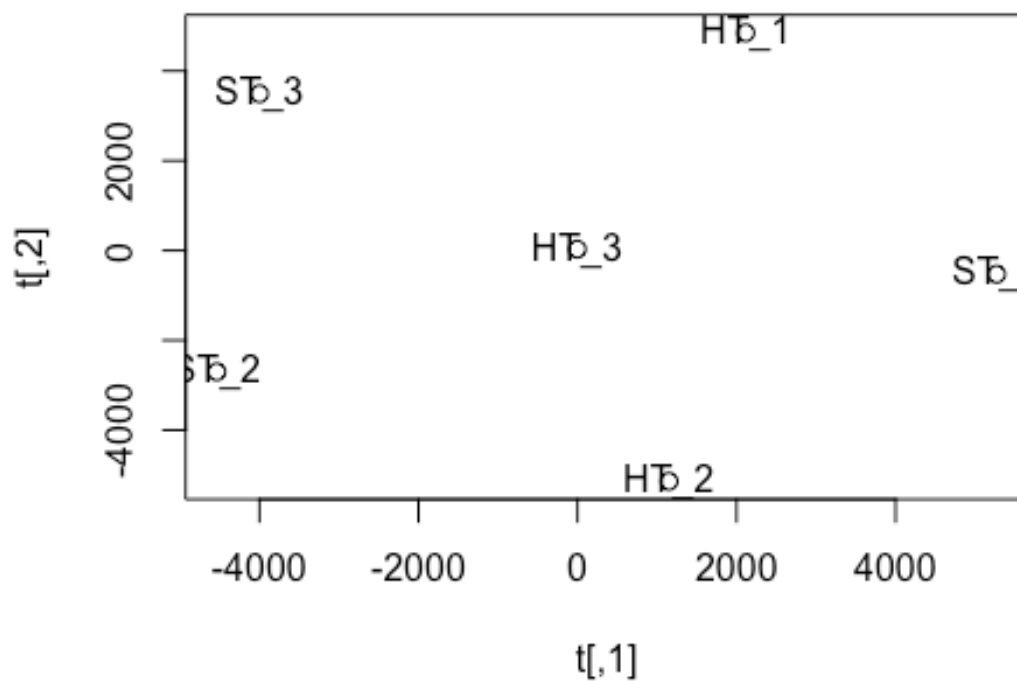
## sigma summary: Min. : 0.0625 |1st Qu. : 0.0625 |Median : 0.0625 |Mean :
0.0625 |3rd Qu. : 0.0625 |Max. : 0.0625 |

## Epoch: Iteration #100 error is: 28.1021691089438
## Epoch: Iteration #200 error is: 5.27773082814066
## Epoch: Iteration #300 error is: 5.26703975316327
## Epoch: Iteration #400 error is: 5.2569246007782
## Epoch: Iteration #500 error is: 5.25319451640083
```

```

## Epoch: Iteration #600 error is: 5.25216747838392
## Epoch: Iteration #700 error is: 5.25188590016786
## Epoch: Iteration #800 error is: 5.25179791525021
## Epoch: Iteration #900 error is: 5.25176641490406
## Epoch: Iteration #1000 error is: 5.25175380696797

```

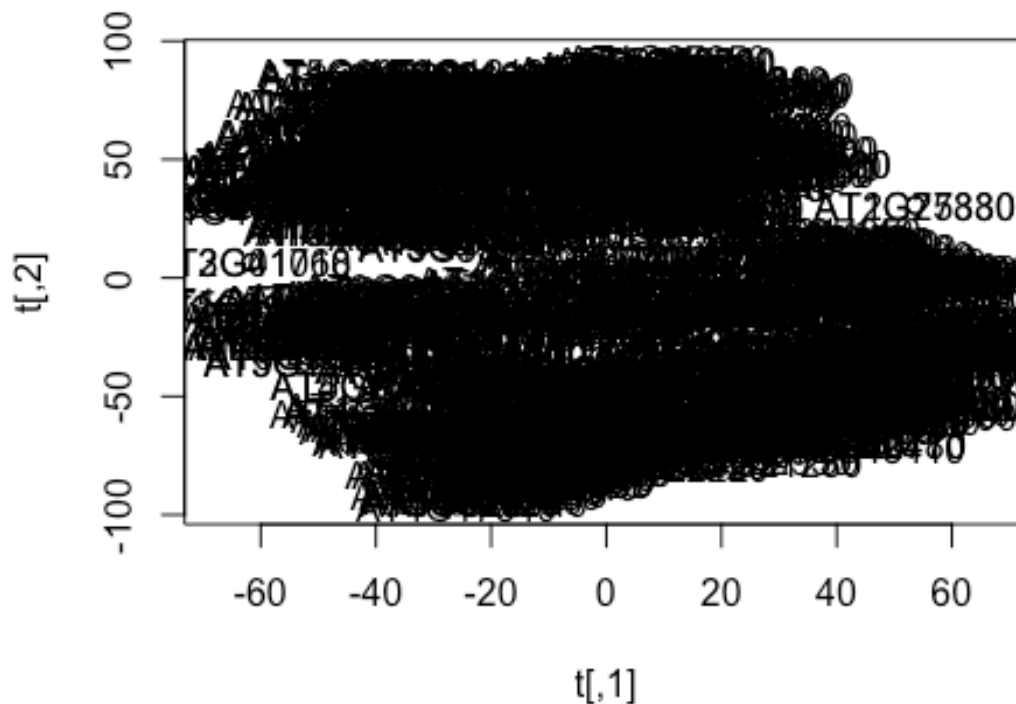


```

t <- tsne(data, perplexity=10); plot(t); text(t, labels=rownames(data))
## sigma summary: Min. : 0.0501806619663321 |1st Qu. : 0.0990293354272448
|Median : 0.125192130777505 |Mean : 0.175977319721109 |3rd Qu. :
0.191043929326166 |Max. : 1.47584602455759 |
## Epoch: Iteration #100 error is: 15.8612934209191
## Epoch: Iteration #200 error is: 1.15809893538394
## Epoch: Iteration #300 error is: 0.930499770763389
## Epoch: Iteration #400 error is: 0.836462251963063
## Epoch: Iteration #500 error is: 0.802139998882542

```

```
## Epoch: Iteration #600 error is: 0.784702043567304
## Epoch: Iteration #700 error is: 0.774184624969805
## Epoch: Iteration #800 error is: 0.767228689205527
## Epoch: Iteration #900 error is: 0.762274380939117
## Epoch: Iteration #1000 error is: 0.758554647608327
```



Play with the perplexity parameter, the number of neighbours considered, to obtain different visualisations (do not set it too high).

Optional

Repeat the analyses above for a dataset containing time series measurements on the Arabidopsis apical meristem, two replicates for 10 stages M1, ..., M10 (Klepikova et al., BMC Genomics 2015). The data is available as:

```
counts =  
read.table("http://www.bioinformatics.nl/courses/RNAseq/time_series_klepikova_2015_DESeq2.csv", sep=";", row.names=1, header=TRUE, stringsAsFactors=FALSE)
```

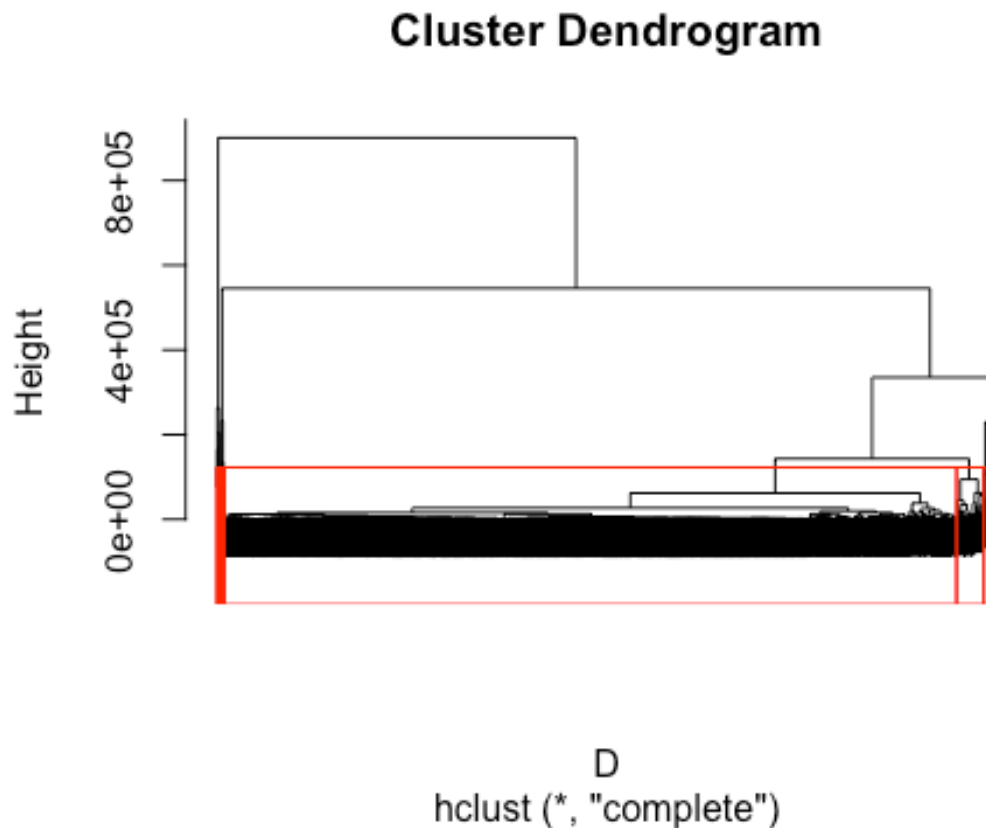
Hierarchical clustering

Next, you will attempt to find clusters in the ST vs. HT data. Start by calculating the Euclidean distance matrix between the genes in the data and use this to calculate a hierarchical clustering with complete linkage:

```
D <- dist(data)
hcgc <- hclust(D)
```

You can visualise the clustering and highlight 5 clusters as follows:

```
plot(hcgc, labels=FALSE)
rect.hclust(hcgc, k=12, border="red")
```

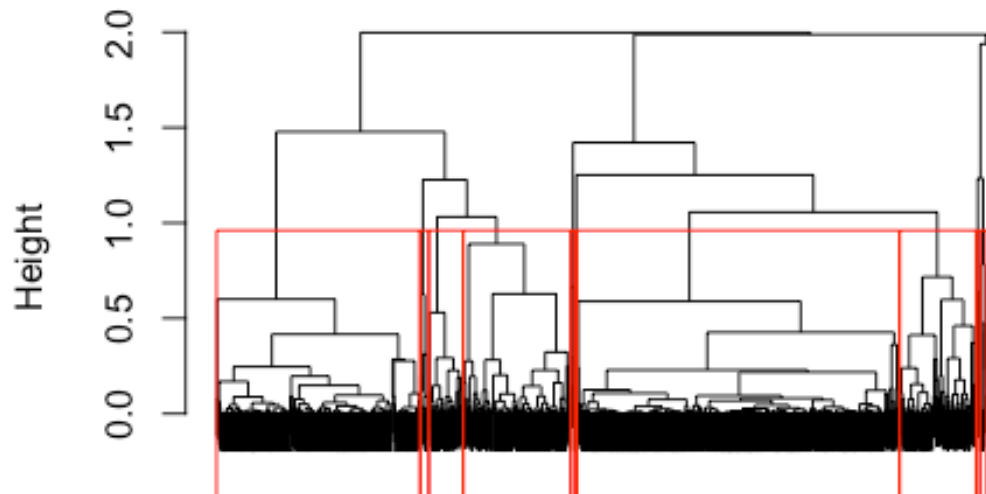


What do you think of the resulting clustering?

Now replace the Euclidean distance by a correlation-based distance and repeat the hierarchical clustering:

```
D <- as.dist(1-cor(t(data)))
hcgc <- hclust(D)
plot(hcgc, labels=FALSE)
rect.hclust(hcgc, k=12, border="red")
```


Cluster Dendrogram



D
hclust (*, "complete")

Do the clusterings improve?

Try to vary the linkage (try "single" and "average") and see whether the dendrograms change:

```
hcgs <- hclust(D, method="single")  
plot(hcgs, labels=FALSE)
```

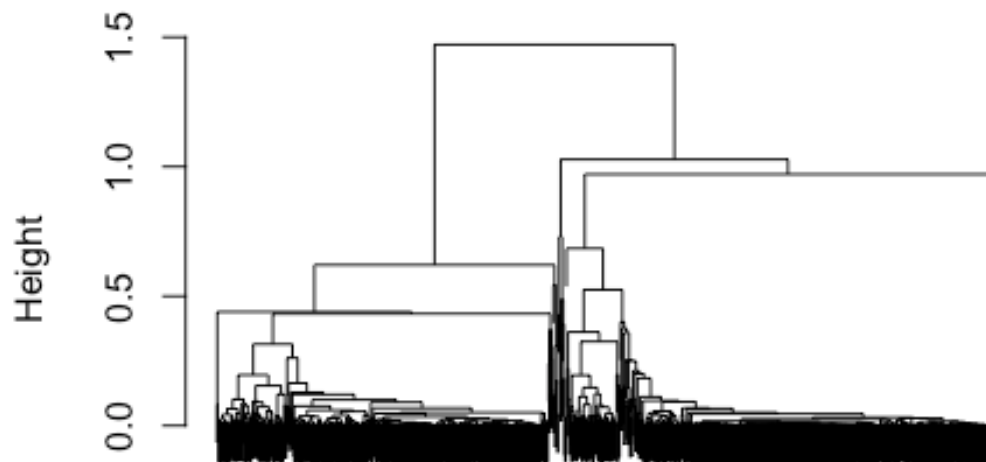
Cluster Dendrogram



D
hclust (*, "single")

```
hcga <- hclust(D, method="average")  
plot(hcga, labels=FALSE)
```

Cluster Dendrogram

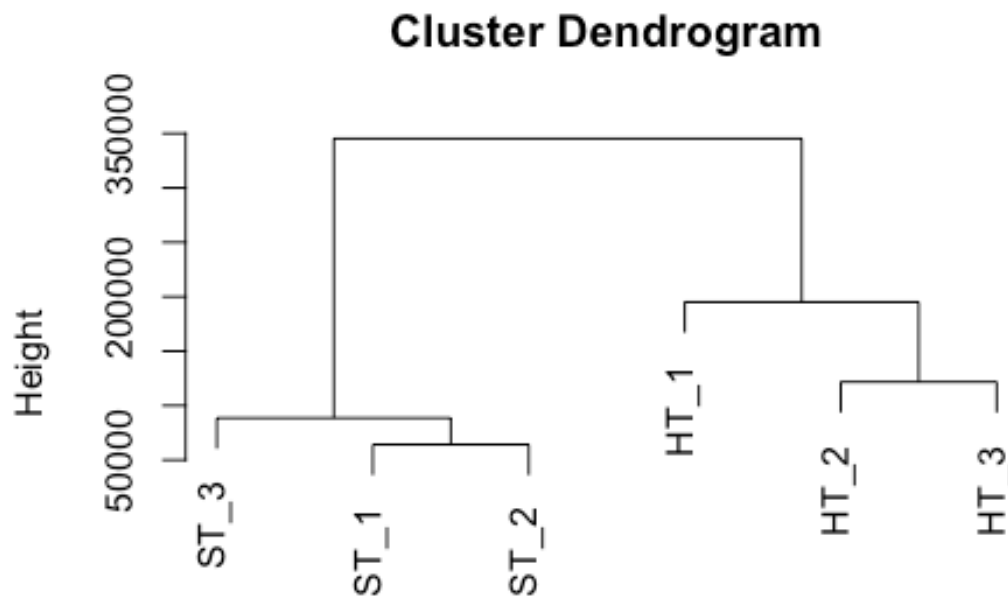


```
D  
hclust (*, "average")
```

Try to explain the results you get.

Next, repeat the above to cluster *samples* rather than *genes*:

```
D <- dist(t(data))  
hcs <- hclust(D)  
plot(hcs)
```



D
hclust (*, "complete")

Cut the gene dendrogram into k (e.g. 12) clusters, select one of these (of a reasonable size, look at the output of `table`), say group m (e.g. 2), and write the genes it contains to a file as follows:

```
groups <- cutree(hcgc,k)
table(groups)

## groups
##  1  2  3  4  5  6  7  8  9 10 11 12
## 413 261 138 98 6 7 5 9 11 6 44 2

write.table(colnames(t(data))[groups==m], file="hc.txt", quote=FALSE,
row.names=FALSE, col.names=FALSE)
```

where you replace k and m by your chosen values. Please save the file "hc.txt" in a safe place (such as your desktop), as you will need it for further analysis tomorrow.

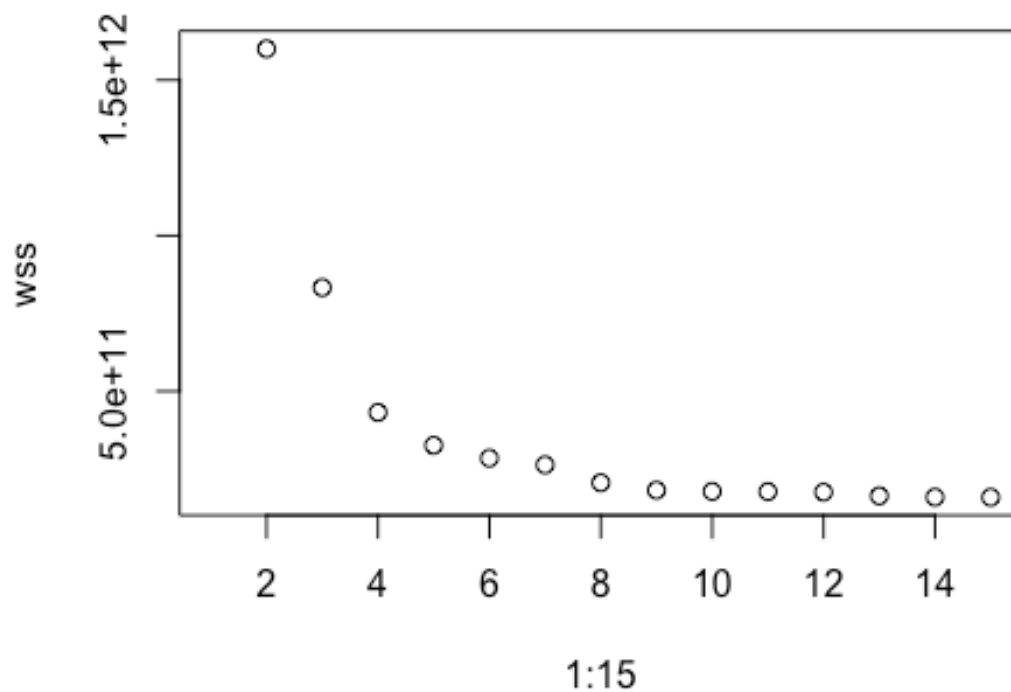
K-means clustering

Calculate the total within-scatter when using 2 ... 15 clusters and plot it as a function of k :

```

wss = c()
for (i in 2:15)
  wss[i] <- kmeans(data,centers=i)$tot.withinss
## Warning: did not converge in 10 iterations
## Warning: did not converge in 10 iterations
plot(1:15,wss)

```



What do you think the optimal number of clusters is? Rerun the above commands a few times. Do you get the same results each time? Why (not)?

Cluster the data into k (e.g. 7) clusters, select one of these (of a reasonable size, look at the output of table), say m, and write the genes it contains to a file (also in a safe place):

```

km <- kmeans(data,k)
table(km$cluster)
##
##  1  2  3  4  5  6  7
## 12 32 25  5 10 155 761

```

```
write.table(colnames(t(data))[km$cluster==m], file="km.txt", quote=FALSE,
row.names=FALSE, col.names=FALSE)
```

To find a reasonable size cluster, you can check the sizes where you replace k and m by the numbers you chose.

Coexpression networks: WGCNA

First, install and load the WGCNA library:

```
source("https://bioconductor.org/biocLite.R")
biocLite("WGCNA")

library(WGCNA)

## Loading required package: dynamicTreeCut
## Loading required package: fastcluster
##
## Attaching package: 'fastcluster'
##
## The following object is masked from 'package:stats':
##
##   hclust
##
## =====
## *
## * Package WGCNA 1.63 loaded.
## *
## * Important note: It appears that your system supports multi-threading,
## * but it is not enabled within WGCNA in R.
## * To allow multi-threading within WGCNA with all available cores, use
## *
## *     allowWGCNAThreads()
## *
## * within R. Use disableWGCNAThreads() to disable threading if
## * necessary.
## * Alternatively, set the following environment variable on your system:
## *
## *     ALLOW_WGCNA_THREADS=<number_of_processors>
## *
## * for example
## *
## *     ALLOW_WGCNA_THREADS=4
## *
## * To set the environment variable in linux bash shell, type
## *
```

```
## *           export ALLOW_WGCNA_THREADS=4
## *
## *   before running R. Other operating systems or shells will
## *   have a similar command to achieve the same aim.
## *
## =====
##
## Attaching package: 'WGCNA'
##
## The following object is masked from 'package:stats':
##
##   cor
```

Note that this is a complex package with many routines, and a long list of options and parameters. Here you will use pre-selected parameters which give reasonable results, but you may have to choose different settings on other datasets.

Load the Arabidopsis apical meristem time series data and select a number of interesting genes, as above:

```
counts =
read.table("http://www.bioinformatics.nl/courses/RNAseq/time_series_klepikova
_2015_DESeq2.csv", sep=",", row.names=1, header=TRUE, stringsAsFactors=FALSE)
m = apply(counts,1,mad)
ind = order(m,decreasing = TRUE,na.last = NA)
data = counts[ind[1:ngenes],]
```

Now create a module network on the log-transformed data

```
net = blockwiseModules(log2(t(data)+1), power=12,
                       TOMType="unsigned",
                       minModuleSize=30, reassignThreshold=0,
                       mergeCutHeight=0.1,numericLabels=TRUE,
                       pamRespectsDendro=FALSE,
                       saveTOMs=FALSE, verbose=3)

## Calculating module eigengenes block-wise from all genes
##   Flagging genes and samples with too many missing values...
##   ..step 1
##   ..Working on block 1 .
##   TOM calculation: adjacency..
##   ..will not use multithreading.
##   Fraction of slow calculations: 0.000000
##   ..connectivity..
##   ..matrix multiplication (system BLAS)..
##   ..normalization..
##   ..done.
##   ....clustering..
##   ....detecting modules..
##   ....calculating module eigengenes..
```

```
## ....checking kME in modules..
## ..removing 1 genes from module 3 because their kME is too low.
## ..removing 1 genes from module 5 because their kME is too low.
## ..merging modules that are too close..
## mergeCloseModules: Merging modules whose distance is less than 0.1
## Calculating new MEs...
```

Each gene is now assigned a “color” corresponding to its module. Check how many modules there are and how large they are:

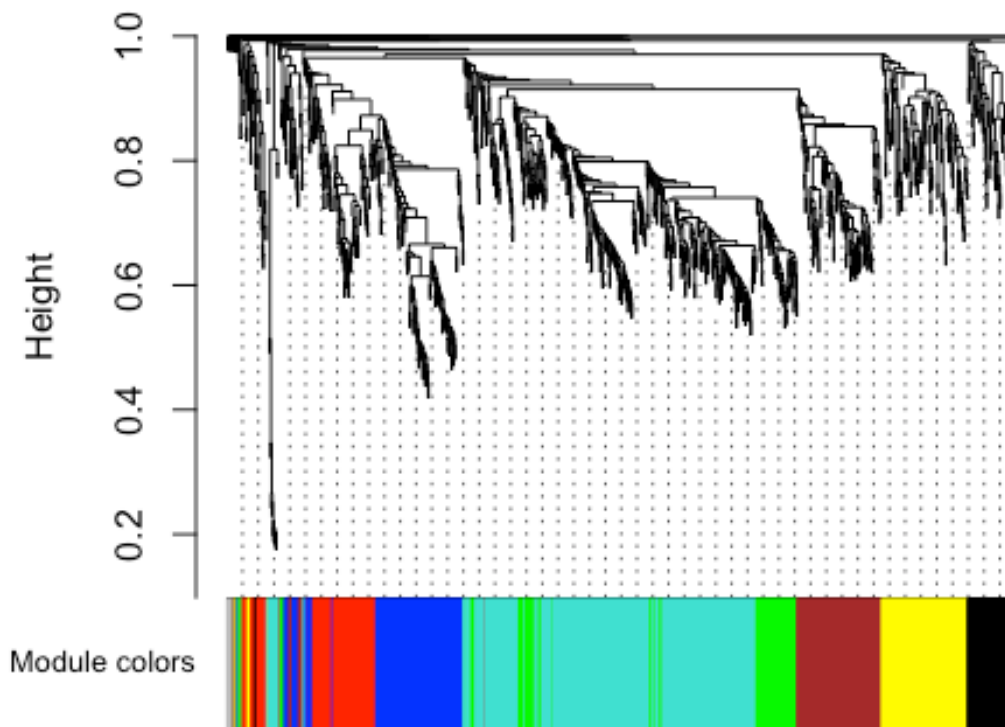
```
table(net$colors)
```

```
##
##  0  1  2  3  4  5  6  7
## 17 349 138 121 116 101 100 58
```

Now visualise the network in the form of a clustering:

```
mergedColors = labels2colors(net$colors)
plotDendroAndColors(net$dendrograms[[1]], mergedColors[net$blockGenes[[1]]],
  "Module colors", dendroLabels=FALSE, hang=0.03,
  addGuide=TRUE, guideHang=0.05)
```

Cluster Dendrogram



What do you think of the module sizes?

WGCNA also summarizes the expression in each module as an “eigengene”, i.e. the first principal component of the gene expression values in that module. You can inspect these as follows:

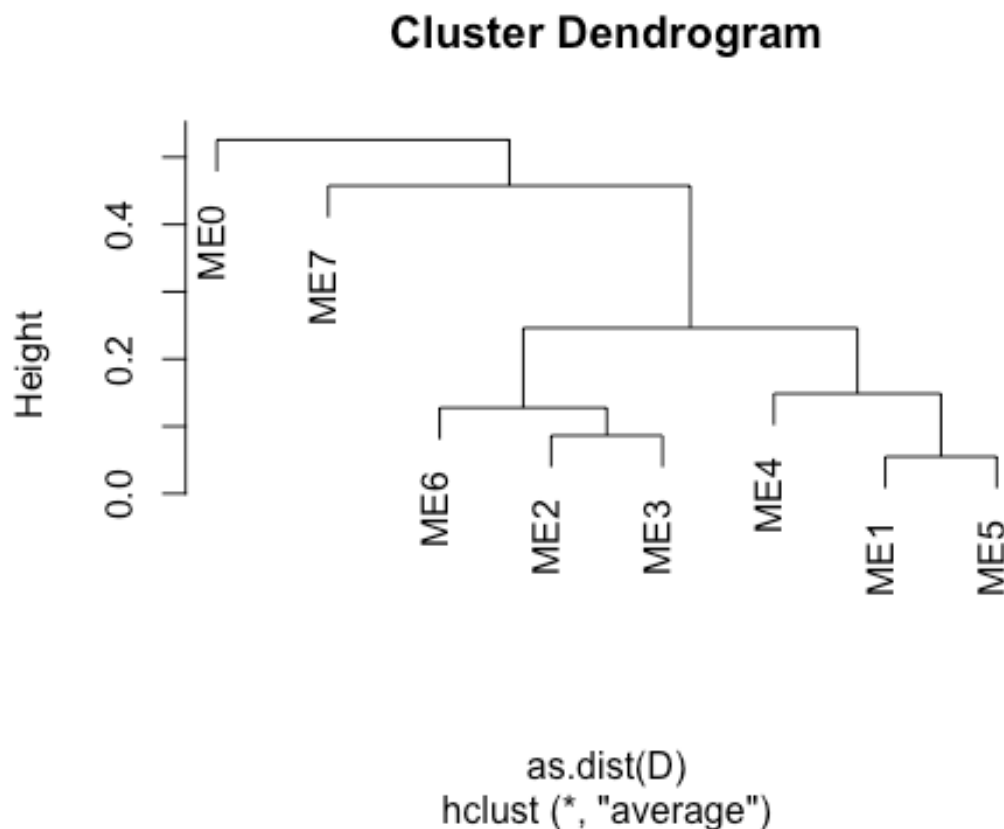
```
me = moduleEigengenes(log2(t(data)+1), colors=net$colors)$eigengenes
dev.off()

## null device
##          1

for (i in 1:8)
  plot(me[,i])
```

You can also inspect the relation between the modules, by clustering the eigengenes:

```
D <- 1-(1+cor(me, use="p"))/2
hcm = hclust(as.dist(D), method="average")
plot(hcm)
```



Can you make sense of the expression patterns in the modules (M1...M10 correspond to 10 different development stages)? And of the relation between the modules? Note that the modules are numbered 0...N-1, where the eigengene plots are numbered 1...N.

Finally, save one of the modules (e.g. the 6th) to a file, for use tomorrow:

```

TOM = TOMsimilarityFromExpr(log2(t(data)+1), power = 6);

## TOM calculation: adjacency..
## ..will not use multithreading.
## Fraction of slow calculations: 0.000000
## ..connectivity..
## ..matrix multiplication (system BLAS)..
## ..normalization..
## ..done.

inmod = which(net$colors==6)
modgenes = rownames(data)
colnames(TOM) <- modgenes; rownames(TOM) <- modgenes;
exportNetworkToCytoscape(TOM[inmod,inmod],
  edgeFile='wgcna_edges.txt',
  nodeFile='wgcna_nodes.txt',
  weighted=TRUE, threshold = 0.02,
  nodeNames=modgenes);

## $edgeData
##      fromNode   toNode   weight direction fromAltName toAltName
## 1   AT3G41768 AT2G01010 0.27203761 undirected      NA      NA
## 2   AT3G41768 AT1G29930 0.37487169 undirected      NA      NA
## 3   AT3G41768 AT2G21660 0.35456252 undirected      NA      NA
## 4   AT3G41768 AT4G22485 0.33960885 undirected      NA      NA
## 5   AT3G41768 AT4G22505 0.18184564 undirected      NA      NA
## 6   AT3G41768 AT5G60390 0.05469214 undirected      NA      NA
## 7   AT3G41768 AT1G56070 0.02380306 undirected      NA      NA
## 8   AT3G41768 AT5G02380 0.35295330 undirected      NA      NA
## 9   AT3G41768 AT4G22475 0.31503345 undirected      NA      NA
## 10  AT3G41768 AT5G02500 0.41474415 undirected      NA      NA
## 11  AT3G41768 AT4G22490 0.32482618 undirected      NA      NA
## 12  AT3G41768 AT4G21960 0.12096886 undirected      NA      NA
## 13  AT3G41768 AT2G30860 0.40746466 undirected      NA      NA
## 14  AT3G41768 AT3G08580 0.36468138 undirected      NA      NA
## 15  AT3G41768 AT1G78370 0.05444803 undirected      NA      NA
## 16  AT3G41768 AT4G22510 0.25567585 undirected      NA      NA
## 17  AT3G41768 AT1G07590 0.36209410 undirected      NA      NA
## 18  AT3G41768 AT3G12145 0.31695152 undirected      NA      NA
## 19  AT3G41768 AT5G54770 0.27488135 undirected      NA      NA
## 20  AT3G41768 AT1G67090 0.26366517 undirected      NA      NA
## 21  AT3G41768 AT1G62500 0.39947525 undirected      NA      NA
## 22  AT3G41768 AT2G38540 0.20182634 undirected      NA      NA
## 23  AT3G41768 AT1G13710 0.36304480 undirected      NA      NA
## 24  AT3G41768 AT4G03210 0.22841626 undirected      NA      NA
## 25  AT3G41768 AT3G22121 0.35084027 undirected      NA      NA
## 26  AT3G41768 AT5G09220 0.37200385 undirected      NA      NA
## 27  AT3G41768 AT4G22517 0.25981785 undirected      NA      NA
## 28  AT3G41768 AT3G16640 0.32419346 undirected      NA      NA
## 29  AT3G41768 AT4G34870 0.36465350 undirected      NA      NA

```

| | | | | | | |
|-------|-----------|-----------|------------|------------|----|----|
| ## 30 | AT3G41768 | AT4G29030 | 0.14588446 | undirected | NA | NA |
| ## 31 | AT3G41768 | AT2G02100 | 0.37968805 | undirected | NA | NA |
| ## 32 | AT3G41768 | AT3G05727 | 0.30285131 | undirected | NA | NA |
| ## 33 | AT3G41768 | AT5G27850 | 0.31119934 | undirected | NA | NA |
| ## 34 | AT3G41768 | AT1G43170 | 0.24614874 | undirected | NA | NA |
| ## 35 | AT3G41768 | AT4G22495 | 0.41080393 | undirected | NA | NA |
| ## 36 | AT3G41768 | AT3G09200 | 0.28841945 | undirected | NA | NA |
| ## 37 | AT3G41768 | AT1G14320 | 0.39093532 | undirected | NA | NA |
| ## 38 | AT3G41768 | AT1G13930 | 0.37638191 | undirected | NA | NA |
| ## 39 | AT3G41768 | AT2G36530 | 0.21964555 | undirected | NA | NA |
| ## 40 | AT3G41768 | AT3G49910 | 0.37692395 | undirected | NA | NA |
| ## 41 | AT3G41768 | AT2G34480 | 0.37677303 | undirected | NA | NA |
| ## 42 | AT3G41768 | AT5G02960 | 0.32657288 | undirected | NA | NA |
| ## 43 | AT3G41768 | AT2G18020 | 0.30058823 | undirected | NA | NA |
| ## 44 | AT3G41768 | AT1G13440 | 0.32810600 | undirected | NA | NA |
| ## 45 | AT3G41768 | AT2G16600 | 0.30739568 | undirected | NA | NA |
| ## 46 | AT3G41768 | AT1G07920 | 0.22405767 | undirected | NA | NA |
| ## 47 | AT3G41768 | AT1G04410 | 0.28745299 | undirected | NA | NA |
| ## 48 | AT3G41768 | AT2G36830 | 0.34957550 | undirected | NA | NA |
| ## 49 | AT3G41768 | AT3G15353 | 0.28009068 | undirected | NA | NA |
| ## 50 | AT3G41768 | AT1G62480 | 0.41573595 | undirected | NA | NA |
| ## 51 | AT3G41768 | AT5G38940 | 0.31555197 | undirected | NA | NA |
| ## 52 | AT3G41768 | ATCG01180 | 0.38059610 | undirected | NA | NA |
| ## 53 | AT3G41768 | AT1G07930 | 0.31034013 | undirected | NA | NA |
| ## 54 | AT3G41768 | ATCG00950 | 0.38996335 | undirected | NA | NA |
| ## 55 | AT3G41768 | AT3G13920 | 0.29143349 | undirected | NA | NA |
| ## 56 | AT3G41768 | AT1G28290 | 0.30627537 | undirected | NA | NA |
| ## 57 | AT3G41768 | AT1G04270 | 0.37656596 | undirected | NA | NA |
| ## 58 | AT3G41768 | AT4G35100 | 0.37105393 | undirected | NA | NA |
| ## 59 | AT3G41768 | AT5G48480 | 0.38361003 | undirected | NA | NA |
| ## 60 | AT3G41768 | AT1G52400 | 0.23852067 | undirected | NA | NA |
| ## 61 | AT3G41768 | AT3G02470 | 0.20801626 | undirected | NA | NA |
| ## 62 | AT3G41768 | AT5G15200 | 0.37700956 | undirected | NA | NA |
| ## 63 | AT3G41768 | AT5G48485 | 0.41037753 | undirected | NA | NA |
| ## 64 | AT3G41768 | AT1G20620 | 0.36127283 | undirected | NA | NA |
| ## 65 | AT3G41768 | AT2G27720 | 0.40318831 | undirected | NA | NA |
| ## 66 | AT3G41768 | AT5G02870 | 0.26506717 | undirected | NA | NA |
| ## 67 | AT3G41768 | AT4G15000 | 0.35303572 | undirected | NA | NA |
| ## 68 | AT3G41768 | AT5G20290 | 0.17507783 | undirected | NA | NA |
| ## 69 | AT3G41768 | AT4G31700 | 0.19855481 | undirected | NA | NA |
| ## 70 | AT3G41768 | AT3G04400 | 0.17144412 | undirected | NA | NA |
| ## 71 | AT3G41768 | AT3G02230 | 0.25964359 | undirected | NA | NA |
| ## 72 | AT3G41768 | AT1G54410 | 0.36024321 | undirected | NA | NA |
| ## 73 | AT3G41768 | AT3G24830 | 0.35473335 | undirected | NA | NA |
| ## 74 | AT3G41768 | AT1G48920 | 0.16516942 | undirected | NA | NA |
| ## 75 | AT3G41768 | AT3G08770 | 0.40200683 | undirected | NA | NA |
| ## 76 | AT3G41768 | AT3G05590 | 0.33996738 | undirected | NA | NA |
| ## 77 | AT3G41768 | AT4G38680 | 0.40765971 | undirected | NA | NA |
| ## 78 | AT3G41768 | AT3G04840 | 0.39360804 | undirected | NA | NA |
| ## 79 | AT3G41768 | AT2G28790 | 0.26664257 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 80 | AT3G41768 | AT1G70600 | 0.31697129 | undirected | NA | NA |
| ## 81 | AT3G41768 | AT4G27090 | 0.38848732 | undirected | NA | NA |
| ## 82 | AT3G41768 | AT1G77510 | 0.33475316 | undirected | NA | NA |
| ## 83 | AT3G41768 | AT1G70830 | 0.18799791 | undirected | NA | NA |
| ## 84 | AT3G41768 | AT1G15690 | 0.23612725 | undirected | NA | NA |
| ## 85 | AT3G41768 | AT3G52590 | 0.16454055 | undirected | NA | NA |
| ## 86 | AT3G41768 | AT5G07090 | 0.24242838 | undirected | NA | NA |
| ## 87 | AT3G41768 | AT5G17920 | 0.19490620 | undirected | NA | NA |
| ## 88 | AT3G41768 | AT5G56030 | 0.27348168 | undirected | NA | NA |
| ## 89 | AT3G41768 | AT2G41840 | 0.35899949 | undirected | NA | NA |
| ## 90 | AT3G41768 | AT3G60245 | 0.36021091 | undirected | NA | NA |
| ## 91 | AT3G41768 | AT2G08665 | 0.31706531 | undirected | NA | NA |
| ## 92 | AT3G41768 | AT3G26520 | 0.04913502 | undirected | NA | NA |
| ## 93 | AT3G41768 | AT2G42840 | 0.40862296 | undirected | NA | NA |
| ## 94 | AT3G41768 | AT1G72370 | 0.25692586 | undirected | NA | NA |
| ## 95 | AT3G41768 | AT2G05520 | 0.33524546 | undirected | NA | NA |
| ## 96 | AT3G41768 | AT4G22513 | 0.32513322 | undirected | NA | NA |
| ## 97 | AT3G41768 | AT4G22530 | 0.37382163 | undirected | NA | NA |
| ## 98 | AT3G41768 | ATCG01210 | 0.39077993 | undirected | NA | NA |
| ## 99 | AT3G41768 | AT3G25520 | 0.34335908 | undirected | NA | NA |
| ## 100 | AT2G01010 | AT1G29930 | 0.24548115 | undirected | NA | NA |
| ## 101 | AT2G01010 | AT2G21660 | 0.13000994 | undirected | NA | NA |
| ## 102 | AT2G01010 | AT4G22485 | 0.27056406 | undirected | NA | NA |
| ## 103 | AT2G01010 | AT4G22505 | 0.11131301 | undirected | NA | NA |
| ## 104 | AT2G01010 | AT1G56070 | 0.02746110 | undirected | NA | NA |
| ## 105 | AT2G01010 | AT5G02380 | 0.26578390 | undirected | NA | NA |
| ## 106 | AT2G01010 | AT4G22475 | 0.32794339 | undirected | NA | NA |
| ## 107 | AT2G01010 | AT5G02500 | 0.21046340 | undirected | NA | NA |
| ## 108 | AT2G01010 | AT4G22490 | 0.24368387 | undirected | NA | NA |
| ## 109 | AT2G01010 | AT4G21960 | 0.04098821 | undirected | NA | NA |
| ## 110 | AT2G01010 | AT2G30860 | 0.23945882 | undirected | NA | NA |
| ## 111 | AT2G01010 | AT3G08580 | 0.34827571 | undirected | NA | NA |
| ## 112 | AT2G01010 | AT1G78370 | 0.06567932 | undirected | NA | NA |
| ## 113 | AT2G01010 | AT4G22510 | 0.25278676 | undirected | NA | NA |
| ## 114 | AT2G01010 | AT1G07590 | 0.22490930 | undirected | NA | NA |
| ## 115 | AT2G01010 | AT3G12145 | 0.20876502 | undirected | NA | NA |
| ## 116 | AT2G01010 | AT5G54770 | 0.22652980 | undirected | NA | NA |
| ## 117 | AT2G01010 | AT1G67090 | 0.29122287 | undirected | NA | NA |
| ## 118 | AT2G01010 | AT1G62500 | 0.19597104 | undirected | NA | NA |
| ## 119 | AT2G01010 | AT2G38540 | 0.11495770 | undirected | NA | NA |
| ## 120 | AT2G01010 | AT1G13710 | 0.28462228 | undirected | NA | NA |
| ## 121 | AT2G01010 | AT4G03210 | 0.23579901 | undirected | NA | NA |
| ## 122 | AT2G01010 | AT3G22121 | 0.24867630 | undirected | NA | NA |
| ## 123 | AT2G01010 | AT5G09220 | 0.17298116 | undirected | NA | NA |
| ## 124 | AT2G01010 | AT4G22517 | 0.10166465 | undirected | NA | NA |
| ## 125 | AT2G01010 | AT3G16640 | 0.25408964 | undirected | NA | NA |
| ## 126 | AT2G01010 | AT4G34870 | 0.20835658 | undirected | NA | NA |
| ## 127 | AT2G01010 | AT4G29030 | 0.10211198 | undirected | NA | NA |
| ## 128 | AT2G01010 | AT2G02100 | 0.21708519 | undirected | NA | NA |
| ## 129 | AT2G01010 | AT3G05727 | 0.34259762 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 130 | AT2G01010 | AT5G27850 | 0.29579676 | undirected | NA | NA |
| ## 131 | AT2G01010 | AT1G43170 | 0.24930932 | undirected | NA | NA |
| ## 132 | AT2G01010 | AT4G22495 | 0.21036764 | undirected | NA | NA |
| ## 133 | AT2G01010 | AT3G09200 | 0.25232455 | undirected | NA | NA |
| ## 134 | AT2G01010 | AT1G14320 | 0.16610438 | undirected | NA | NA |
| ## 135 | AT2G01010 | AT1G13930 | 0.20452469 | undirected | NA | NA |
| ## 136 | AT2G01010 | AT2G36530 | 0.10464308 | undirected | NA | NA |
| ## 137 | AT2G01010 | AT3G49910 | 0.14143443 | undirected | NA | NA |
| ## 138 | AT2G01010 | AT2G34480 | 0.26411870 | undirected | NA | NA |
| ## 139 | AT2G01010 | AT5G02960 | 0.24018853 | undirected | NA | NA |
| ## 140 | AT2G01010 | AT2G18020 | 0.22950406 | undirected | NA | NA |
| ## 141 | AT2G01010 | AT1G13440 | 0.29527799 | undirected | NA | NA |
| ## 142 | AT2G01010 | AT2G16600 | 0.23244635 | undirected | NA | NA |
| ## 143 | AT2G01010 | AT1G07920 | 0.23675623 | undirected | NA | NA |
| ## 144 | AT2G01010 | AT1G04410 | 0.20751040 | undirected | NA | NA |
| ## 145 | AT2G01010 | AT2G36830 | 0.25001362 | undirected | NA | NA |
| ## 146 | AT2G01010 | AT3G15353 | 0.13969298 | undirected | NA | NA |
| ## 147 | AT2G01010 | AT1G62480 | 0.19582624 | undirected | NA | NA |
| ## 148 | AT2G01010 | AT5G38940 | 0.32916673 | undirected | NA | NA |
| ## 149 | AT2G01010 | ATCG01180 | 0.24958718 | undirected | NA | NA |
| ## 150 | AT2G01010 | AT1G07930 | 0.27674220 | undirected | NA | NA |
| ## 151 | AT2G01010 | ATCG00950 | 0.21648486 | undirected | NA | NA |
| ## 152 | AT2G01010 | AT3G13920 | 0.22646056 | undirected | NA | NA |
| ## 153 | AT2G01010 | AT1G28290 | 0.18962972 | undirected | NA | NA |
| ## 154 | AT2G01010 | AT1G04270 | 0.24781978 | undirected | NA | NA |
| ## 155 | AT2G01010 | AT4G35100 | 0.28959699 | undirected | NA | NA |
| ## 156 | AT2G01010 | AT5G48480 | 0.24081331 | undirected | NA | NA |
| ## 157 | AT2G01010 | AT1G52400 | 0.18106312 | undirected | NA | NA |
| ## 158 | AT2G01010 | AT3G02470 | 0.07635789 | undirected | NA | NA |
| ## 159 | AT2G01010 | AT5G15200 | 0.35595828 | undirected | NA | NA |
| ## 160 | AT2G01010 | AT5G48485 | 0.19322929 | undirected | NA | NA |
| ## 161 | AT2G01010 | AT1G20620 | 0.26075217 | undirected | NA | NA |
| ## 162 | AT2G01010 | AT2G27720 | 0.19534581 | undirected | NA | NA |
| ## 163 | AT2G01010 | AT5G02870 | 0.21974820 | undirected | NA | NA |
| ## 164 | AT2G01010 | AT4G15000 | 0.32020689 | undirected | NA | NA |
| ## 165 | AT2G01010 | AT5G20290 | 0.17288776 | undirected | NA | NA |
| ## 166 | AT2G01010 | AT4G31700 | 0.22499674 | undirected | NA | NA |
| ## 167 | AT2G01010 | AT3G04400 | 0.07591569 | undirected | NA | NA |
| ## 168 | AT2G01010 | AT3G02230 | 0.23545880 | undirected | NA | NA |
| ## 169 | AT2G01010 | AT1G54410 | 0.28301373 | undirected | NA | NA |
| ## 170 | AT2G01010 | AT3G24830 | 0.29900880 | undirected | NA | NA |
| ## 171 | AT2G01010 | AT1G48920 | 0.07278139 | undirected | NA | NA |
| ## 172 | AT2G01010 | AT3G08770 | 0.25067612 | undirected | NA | NA |
| ## 173 | AT2G01010 | AT3G05590 | 0.36229395 | undirected | NA | NA |
| ## 174 | AT2G01010 | AT4G38680 | 0.22976084 | undirected | NA | NA |
| ## 175 | AT2G01010 | AT3G04840 | 0.14847852 | undirected | NA | NA |
| ## 176 | AT2G01010 | AT2G28790 | 0.11135805 | undirected | NA | NA |
| ## 177 | AT2G01010 | AT1G70600 | 0.25356954 | undirected | NA | NA |
| ## 178 | AT2G01010 | AT4G27090 | 0.23861489 | undirected | NA | NA |
| ## 179 | AT2G01010 | AT1G77510 | 0.23781202 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 180 | AT2G01010 | AT1G70830 | 0.06875543 | undirected | NA | NA |
| ## 181 | AT2G01010 | AT1G15690 | 0.20919395 | undirected | NA | NA |
| ## 182 | AT2G01010 | AT3G52590 | 0.05974498 | undirected | NA | NA |
| ## 183 | AT2G01010 | AT5G07090 | 0.23827175 | undirected | NA | NA |
| ## 184 | AT2G01010 | AT5G17920 | 0.05136159 | undirected | NA | NA |
| ## 185 | AT2G01010 | AT5G56030 | 0.27452827 | undirected | NA | NA |
| ## 186 | AT2G01010 | AT2G41840 | 0.20021197 | undirected | NA | NA |
| ## 187 | AT2G01010 | AT3G60245 | 0.26147798 | undirected | NA | NA |
| ## 188 | AT2G01010 | AT2G08665 | 0.22644328 | undirected | NA | NA |
| ## 189 | AT2G01010 | AT2G42840 | 0.19265516 | undirected | NA | NA |
| ## 190 | AT2G01010 | AT1G72370 | 0.15837898 | undirected | NA | NA |
| ## 191 | AT2G01010 | AT2G05520 | 0.28746122 | undirected | NA | NA |
| ## 192 | AT2G01010 | AT4G22513 | 0.27938311 | undirected | NA | NA |
| ## 193 | AT2G01010 | AT4G22530 | 0.22791462 | undirected | NA | NA |
| ## 194 | AT2G01010 | ATCG01210 | 0.17884762 | undirected | NA | NA |
| ## 195 | AT2G01010 | AT3G25520 | 0.24214069 | undirected | NA | NA |
| ## 196 | AT1G29930 | AT2G21660 | 0.41931446 | undirected | NA | NA |
| ## 197 | AT1G29930 | AT4G22485 | 0.32188971 | undirected | NA | NA |
| ## 198 | AT1G29930 | AT4G22505 | 0.20205763 | undirected | NA | NA |
| ## 199 | AT1G29930 | AT5G60390 | 0.07387742 | undirected | NA | NA |
| ## 200 | AT1G29930 | AT1G56070 | 0.02467843 | undirected | NA | NA |
| ## 201 | AT1G29930 | AT5G02380 | 0.35032232 | undirected | NA | NA |
| ## 202 | AT1G29930 | AT4G22475 | 0.29364806 | undirected | NA | NA |
| ## 203 | AT1G29930 | AT5G02500 | 0.44544075 | undirected | NA | NA |
| ## 204 | AT1G29930 | AT4G22490 | 0.32606097 | undirected | NA | NA |
| ## 205 | AT1G29930 | AT4G21960 | 0.15537650 | undirected | NA | NA |
| ## 206 | AT1G29930 | AT2G30860 | 0.42761002 | undirected | NA | NA |
| ## 207 | AT1G29930 | AT3G08580 | 0.34628682 | undirected | NA | NA |
| ## 208 | AT1G29930 | AT1G78370 | 0.05264158 | undirected | NA | NA |
| ## 209 | AT1G29930 | AT4G22510 | 0.25297857 | undirected | NA | NA |
| ## 210 | AT1G29930 | AT1G07590 | 0.39729713 | undirected | NA | NA |
| ## 211 | AT1G29930 | AT3G12145 | 0.32348188 | undirected | NA | NA |
| ## 212 | AT1G29930 | AT5G54770 | 0.25236457 | undirected | NA | NA |
| ## 213 | AT1G29930 | AT1G67090 | 0.24052366 | undirected | NA | NA |
| ## 214 | AT1G29930 | AT1G62500 | 0.43452316 | undirected | NA | NA |
| ## 215 | AT1G29930 | AT2G38540 | 0.22521974 | undirected | NA | NA |
| ## 216 | AT1G29930 | AT1G13710 | 0.37019502 | undirected | NA | NA |
| ## 217 | AT1G29930 | AT4G03210 | 0.19202707 | undirected | NA | NA |
| ## 218 | AT1G29930 | AT3G22121 | 0.37013723 | undirected | NA | NA |
| ## 219 | AT1G29930 | AT5G09220 | 0.41438324 | undirected | NA | NA |
| ## 220 | AT1G29930 | AT4G22517 | 0.30790912 | undirected | NA | NA |
| ## 221 | AT1G29930 | AT3G16640 | 0.31397207 | undirected | NA | NA |
| ## 222 | AT1G29930 | AT4G34870 | 0.39712853 | undirected | NA | NA |
| ## 223 | AT1G29930 | AT4G29030 | 0.15927870 | undirected | NA | NA |
| ## 224 | AT1G29930 | AT2G02100 | 0.40658467 | undirected | NA | NA |
| ## 225 | AT1G29930 | AT3G05727 | 0.27742126 | undirected | NA | NA |
| ## 226 | AT1G29930 | AT5G27850 | 0.30396764 | undirected | NA | NA |
| ## 227 | AT1G29930 | AT1G43170 | 0.21880748 | undirected | NA | NA |
| ## 228 | AT1G29930 | AT4G22495 | 0.44770730 | undirected | NA | NA |
| ## 229 | AT1G29930 | AT3G09200 | 0.27489612 | undirected | NA | NA |

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|----|-----|-----------|-----------|------------|------------|----|----|
| ## | 230 | AT1G29930 | AT1G14320 | 0.44445682 | undirected | NA | NA |
| ## | 231 | AT1G29930 | AT1G13930 | 0.39678493 | undirected | NA | NA |
| ## | 232 | AT1G29930 | AT2G36530 | 0.25097304 | undirected | NA | NA |
| ## | 233 | AT1G29930 | AT3G49910 | 0.43695598 | undirected | NA | NA |
| ## | 234 | AT1G29930 | AT2G34480 | 0.37397417 | undirected | NA | NA |
| ## | 235 | AT1G29930 | AT5G02960 | 0.31776625 | undirected | NA | NA |
| ## | 236 | AT1G29930 | AT2G18020 | 0.30136391 | undirected | NA | NA |
| ## | 237 | AT1G29930 | AT1G13440 | 0.30957856 | undirected | NA | NA |
| ## | 238 | AT1G29930 | AT2G16600 | 0.32345987 | undirected | NA | NA |
| ## | 239 | AT1G29930 | AT1G07920 | 0.18552558 | undirected | NA | NA |
| ## | 240 | AT1G29930 | AT1G04410 | 0.30032259 | undirected | NA | NA |
| ## | 241 | AT1G29930 | AT2G36830 | 0.34018536 | undirected | NA | NA |
| ## | 242 | AT1G29930 | AT3G15353 | 0.31361638 | undirected | NA | NA |
| ## | 243 | AT1G29930 | AT1G62480 | 0.45850245 | undirected | NA | NA |
| ## | 244 | AT1G29930 | AT5G38940 | 0.30011756 | undirected | NA | NA |
| ## | 245 | AT1G29930 | ATCG01180 | 0.39208391 | undirected | NA | NA |
| ## | 246 | AT1G29930 | AT1G07930 | 0.29196879 | undirected | NA | NA |
| ## | 247 | AT1G29930 | ATCG00950 | 0.41068326 | undirected | NA | NA |
| ## | 248 | AT1G29930 | AT3G13920 | 0.27294834 | undirected | NA | NA |
| ## | 249 | AT1G29930 | AT1G28290 | 0.29668278 | undirected | NA | NA |
| ## | 250 | AT1G29930 | AT1G04270 | 0.37626918 | undirected | NA | NA |
| ## | 251 | AT1G29930 | AT4G35100 | 0.38463674 | undirected | NA | NA |
| ## | 252 | AT1G29930 | AT5G48480 | 0.38269077 | undirected | NA | NA |
| ## | 253 | AT1G29930 | AT1G52400 | 0.22544198 | undirected | NA | NA |
| ## | 254 | AT1G29930 | AT3G02470 | 0.25910130 | undirected | NA | NA |
| ## | 255 | AT1G29930 | AT5G15200 | 0.36565691 | undirected | NA | NA |
| ## | 256 | AT1G29930 | AT5G48485 | 0.45295256 | undirected | NA | NA |
| ## | 257 | AT1G29930 | AT1G20620 | 0.34839116 | undirected | NA | NA |
| ## | 258 | AT1G29930 | AT2G27720 | 0.43088208 | undirected | NA | NA |
| ## | 259 | AT1G29930 | AT5G02870 | 0.23908636 | undirected | NA | NA |
| ## | 260 | AT1G29930 | AT4G15000 | 0.34839302 | undirected | NA | NA |
| ## | 261 | AT1G29930 | AT5G20290 | 0.17400043 | undirected | NA | NA |
| ## | 262 | AT1G29930 | AT4G31700 | 0.15710920 | undirected | NA | NA |
| ## | 263 | AT1G29930 | AT3G04400 | 0.19270278 | undirected | NA | NA |
| ## | 264 | AT1G29930 | AT3G02230 | 0.24829505 | undirected | NA | NA |
| ## | 265 | AT1G29930 | AT1G54410 | 0.36044644 | undirected | NA | NA |
| ## | 266 | AT1G29930 | AT3G24830 | 0.35635637 | undirected | NA | NA |
| ## | 267 | AT1G29930 | AT1G48920 | 0.18442204 | undirected | NA | NA |
| ## | 268 | AT1G29930 | AT3G08770 | 0.41111717 | undirected | NA | NA |
| ## | 269 | AT1G29930 | AT3G05590 | 0.31353529 | undirected | NA | NA |
| ## | 270 | AT1G29930 | AT4G38680 | 0.42898668 | undirected | NA | NA |
| ## | 271 | AT1G29930 | AT3G04840 | 0.45314491 | undirected | NA | NA |
| ## | 272 | AT1G29930 | AT2G28790 | 0.31447230 | undirected | NA | NA |
| ## | 273 | AT1G29930 | AT1G70600 | 0.29967023 | undirected | NA | NA |
| ## | 274 | AT1G29930 | AT4G27090 | 0.40152981 | undirected | NA | NA |
| ## | 275 | AT1G29930 | AT1G77510 | 0.32769024 | undirected | NA | NA |
| ## | 276 | AT1G29930 | AT1G70830 | 0.23588394 | undirected | NA | NA |
| ## | 277 | AT1G29930 | AT1G15690 | 0.20980002 | undirected | NA | NA |
| ## | 278 | AT1G29930 | AT3G52590 | 0.20053639 | undirected | NA | NA |
| ## | 279 | AT1G29930 | AT5G07090 | 0.21763269 | undirected | NA | NA |

| | | | | | | | |
|----|-----|-----------|-----------|------------|------------|----|----|
| ## | 280 | AT1G29930 | AT5G17920 | 0.25278297 | undirected | NA | NA |
| ## | 281 | AT1G29930 | AT5G56030 | 0.26987454 | undirected | NA | NA |
| ## | 282 | AT1G29930 | AT2G41840 | 0.39076936 | undirected | NA | NA |
| ## | 283 | AT1G29930 | AT3G60245 | 0.35075195 | undirected | NA | NA |
| ## | 284 | AT1G29930 | AT2G08665 | 0.28858270 | undirected | NA | NA |
| ## | 285 | AT1G29930 | AT3G26520 | 0.06916596 | undirected | NA | NA |
| ## | 286 | AT1G29930 | AT2G42840 | 0.45232181 | undirected | NA | NA |
| ## | 287 | AT1G29930 | AT1G72370 | 0.27027464 | undirected | NA | NA |
| ## | 288 | AT1G29930 | AT2G05520 | 0.34343022 | undirected | NA | NA |
| ## | 289 | AT1G29930 | AT4G22513 | 0.32895247 | undirected | NA | NA |
| ## | 290 | AT1G29930 | AT4G22530 | 0.38497410 | undirected | NA | NA |
| ## | 291 | AT1G29930 | ATCG01210 | 0.43106462 | undirected | NA | NA |
| ## | 292 | AT1G29930 | AT3G25520 | 0.33198516 | undirected | NA | NA |
| ## | 293 | AT2G21660 | AT4G22485 | 0.19207029 | undirected | NA | NA |
| ## | 294 | AT2G21660 | AT4G22505 | 0.23123540 | undirected | NA | NA |
| ## | 295 | AT2G21660 | AT5G60390 | 0.19324297 | undirected | NA | NA |
| ## | 296 | AT2G21660 | AT1G56070 | 0.04679016 | undirected | NA | NA |
| ## | 297 | AT2G21660 | AT5G02380 | 0.16557612 | undirected | NA | NA |
| ## | 298 | AT2G21660 | AT4G22475 | 0.17068590 | undirected | NA | NA |
| ## | 299 | AT2G21660 | AT5G02500 | 0.37799495 | undirected | NA | NA |
| ## | 300 | AT2G21660 | AT4G22490 | 0.13624779 | undirected | NA | NA |
| ## | 301 | AT2G21660 | AT4G21960 | 0.28851260 | undirected | NA | NA |
| ## | 302 | AT2G21660 | AT2G30860 | 0.29464215 | undirected | NA | NA |
| ## | 303 | AT2G21660 | AT3G08580 | 0.19593111 | undirected | NA | NA |
| ## | 304 | AT2G21660 | AT1G78370 | 0.05629519 | undirected | NA | NA |
| ## | 305 | AT2G21660 | AT4G22510 | 0.18152431 | undirected | NA | NA |
| ## | 306 | AT2G21660 | AT1G07590 | 0.42268042 | undirected | NA | NA |
| ## | 307 | AT2G21660 | AT3G12145 | 0.26018037 | undirected | NA | NA |
| ## | 308 | AT2G21660 | AT5G54770 | 0.09911088 | undirected | NA | NA |
| ## | 309 | AT2G21660 | AT1G67090 | 0.13479697 | undirected | NA | NA |
| ## | 310 | AT2G21660 | AT1G62500 | 0.44446315 | undirected | NA | NA |
| ## | 311 | AT2G21660 | AT2G38540 | 0.25265878 | undirected | NA | NA |
| ## | 312 | AT2G21660 | AT1G13710 | 0.30097339 | undirected | NA | NA |
| ## | 313 | AT2G21660 | AT4G03210 | 0.06505041 | undirected | NA | NA |
| ## | 314 | AT2G21660 | AT3G22121 | 0.34812611 | undirected | NA | NA |
| ## | 315 | AT2G21660 | AT5G09220 | 0.26958739 | undirected | NA | NA |
| ## | 316 | AT2G21660 | AT4G22517 | 0.34606869 | undirected | NA | NA |
| ## | 317 | AT2G21660 | AT3G16640 | 0.21990279 | undirected | NA | NA |
| ## | 318 | AT2G21660 | AT4G34870 | 0.24350620 | undirected | NA | NA |
| ## | 319 | AT2G21660 | AT4G29030 | 0.18693967 | undirected | NA | NA |
| ## | 320 | AT2G21660 | AT2G02100 | 0.45018857 | undirected | NA | NA |
| ## | 321 | AT2G21660 | AT3G05727 | 0.16079561 | undirected | NA | NA |
| ## | 322 | AT2G21660 | AT5G27850 | 0.21265603 | undirected | NA | NA |
| ## | 323 | AT2G21660 | AT1G43170 | 0.05586754 | undirected | NA | NA |
| ## | 324 | AT2G21660 | AT4G22495 | 0.34588480 | undirected | NA | NA |
| ## | 325 | AT2G21660 | AT3G09200 | 0.12248072 | undirected | NA | NA |
| ## | 326 | AT2G21660 | AT1G14320 | 0.33787208 | undirected | NA | NA |
| ## | 327 | AT2G21660 | AT1G13930 | 0.32633180 | undirected | NA | NA |
| ## | 328 | AT2G21660 | AT2G36530 | 0.29451319 | undirected | NA | NA |
| ## | 329 | AT2G21660 | AT3G49910 | 0.40360831 | undirected | NA | NA |

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|----|-----|-----------|-----------|------------|------------|----|----|
| ## | 330 | AT2G21660 | AT2G34480 | 0.28031934 | undirected | NA | NA |
| ## | 331 | AT2G21660 | AT5G02960 | 0.20837290 | undirected | NA | NA |
| ## | 332 | AT2G21660 | AT2G18020 | 0.20000347 | undirected | NA | NA |
| ## | 333 | AT2G21660 | AT1G13440 | 0.23048983 | undirected | NA | NA |
| ## | 334 | AT2G21660 | AT2G16600 | 0.29044665 | undirected | NA | NA |
| ## | 335 | AT2G21660 | AT1G07920 | 0.06019105 | undirected | NA | NA |
| ## | 336 | AT2G21660 | AT1G04410 | 0.20887494 | undirected | NA | NA |
| ## | 337 | AT2G21660 | AT2G36830 | 0.22093174 | undirected | NA | NA |
| ## | 338 | AT2G21660 | AT3G15353 | 0.30811242 | undirected | NA | NA |
| ## | 339 | AT2G21660 | AT1G62480 | 0.35346881 | undirected | NA | NA |
| ## | 340 | AT2G21660 | AT5G38940 | 0.18604077 | undirected | NA | NA |
| ## | 341 | AT2G21660 | ATCG01180 | 0.28021352 | undirected | NA | NA |
| ## | 342 | AT2G21660 | AT1G07930 | 0.12139442 | undirected | NA | NA |
| ## | 343 | AT2G21660 | ATCG00950 | 0.39806207 | undirected | NA | NA |
| ## | 344 | AT2G21660 | AT3G13920 | 0.15730780 | undirected | NA | NA |
| ## | 345 | AT2G21660 | AT1G28290 | 0.12109827 | undirected | NA | NA |
| ## | 346 | AT2G21660 | AT1G04270 | 0.28387943 | undirected | NA | NA |
| ## | 347 | AT2G21660 | AT4G35100 | 0.35505896 | undirected | NA | NA |
| ## | 348 | AT2G21660 | AT5G48480 | 0.25534237 | undirected | NA | NA |
| ## | 349 | AT2G21660 | AT1G52400 | 0.08131354 | undirected | NA | NA |
| ## | 350 | AT2G21660 | AT3G02470 | 0.29423097 | undirected | NA | NA |
| ## | 351 | AT2G21660 | AT5G15200 | 0.24941078 | undirected | NA | NA |
| ## | 352 | AT2G21660 | AT5G48485 | 0.40611485 | undirected | NA | NA |
| ## | 353 | AT2G21660 | AT1G20620 | 0.19066173 | undirected | NA | NA |
| ## | 354 | AT2G21660 | AT2G27720 | 0.32544325 | undirected | NA | NA |
| ## | 355 | AT2G21660 | AT5G02870 | 0.10073578 | undirected | NA | NA |
| ## | 356 | AT2G21660 | AT4G15000 | 0.27305191 | undirected | NA | NA |
| ## | 357 | AT2G21660 | AT5G20290 | 0.10663584 | undirected | NA | NA |
| ## | 358 | AT2G21660 | AT4G31700 | 0.02640178 | undirected | NA | NA |
| ## | 359 | AT2G21660 | AT3G04400 | 0.21486936 | undirected | NA | NA |
| ## | 360 | AT2G21660 | AT3G02230 | 0.16176491 | undirected | NA | NA |
| ## | 361 | AT2G21660 | AT1G54410 | 0.33381374 | undirected | NA | NA |
| ## | 362 | AT2G21660 | AT3G24830 | 0.26655387 | undirected | NA | NA |
| ## | 363 | AT2G21660 | AT1G48920 | 0.22726561 | undirected | NA | NA |
| ## | 364 | AT2G21660 | AT3G08770 | 0.23657765 | undirected | NA | NA |
| ## | 365 | AT2G21660 | AT3G05590 | 0.16322037 | undirected | NA | NA |
| ## | 366 | AT2G21660 | AT4G38680 | 0.35342709 | undirected | NA | NA |
| ## | 367 | AT2G21660 | AT3G04840 | 0.32045595 | undirected | NA | NA |
| ## | 368 | AT2G21660 | AT2G28790 | 0.33622656 | undirected | NA | NA |
| ## | 369 | AT2G21660 | AT1G70600 | 0.15823030 | undirected | NA | NA |
| ## | 370 | AT2G21660 | AT4G27090 | 0.33731445 | undirected | NA | NA |
| ## | 371 | AT2G21660 | AT1G77510 | 0.18572779 | undirected | NA | NA |
| ## | 372 | AT2G21660 | AT1G70830 | 0.22910848 | undirected | NA | NA |
| ## | 373 | AT2G21660 | AT1G15690 | 0.04761662 | undirected | NA | NA |
| ## | 374 | AT2G21660 | AT3G52590 | 0.13964676 | undirected | NA | NA |
| ## | 375 | AT2G21660 | AT5G07090 | 0.10268938 | undirected | NA | NA |
| ## | 376 | AT2G21660 | AT5G17920 | 0.30130530 | undirected | NA | NA |
| ## | 377 | AT2G21660 | AT5G56030 | 0.20127394 | undirected | NA | NA |
| ## | 378 | AT2G21660 | AT2G41840 | 0.45238105 | undirected | NA | NA |
| ## | 379 | AT2G21660 | AT3G60245 | 0.17956550 | undirected | NA | NA |

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|----|-----|-----------|-----------|------------|------------|----|----|
| ## | 380 | AT2G21660 | AT2G08665 | 0.08321653 | undirected | NA | NA |
| ## | 381 | AT2G21660 | AT3G26520 | 0.16430210 | undirected | NA | NA |
| ## | 382 | AT2G21660 | AT2G42840 | 0.34627999 | undirected | NA | NA |
| ## | 383 | AT2G21660 | AT1G72370 | 0.23328800 | undirected | NA | NA |
| ## | 384 | AT2G21660 | AT2G05520 | 0.30276790 | undirected | NA | NA |
| ## | 385 | AT2G21660 | AT4G22513 | 0.25867255 | undirected | NA | NA |
| ## | 386 | AT2G21660 | AT4G22530 | 0.32460835 | undirected | NA | NA |
| ## | 387 | AT2G21660 | ATCG01210 | 0.42449764 | undirected | NA | NA |
| ## | 388 | AT2G21660 | AT3G25520 | 0.11821640 | undirected | NA | NA |
| ## | 389 | AT4G22485 | AT4G22505 | 0.15195063 | undirected | NA | NA |
| ## | 390 | AT4G22485 | AT5G60390 | 0.03753423 | undirected | NA | NA |
| ## | 391 | AT4G22485 | AT1G56070 | 0.04489153 | undirected | NA | NA |
| ## | 392 | AT4G22485 | AT5G02380 | 0.30668255 | undirected | NA | NA |
| ## | 393 | AT4G22485 | AT4G22475 | 0.32528835 | undirected | NA | NA |
| ## | 394 | AT4G22485 | AT5G02500 | 0.24974169 | undirected | NA | NA |
| ## | 395 | AT4G22485 | AT4G22490 | 0.24792926 | undirected | NA | NA |
| ## | 396 | AT4G22485 | AT4G21960 | 0.07548309 | undirected | NA | NA |
| ## | 397 | AT4G22485 | AT2G30860 | 0.27750415 | undirected | NA | NA |
| ## | 398 | AT4G22485 | AT3G08580 | 0.33256580 | undirected | NA | NA |
| ## | 399 | AT4G22485 | AT1G78370 | 0.08483249 | undirected | NA | NA |
| ## | 400 | AT4G22485 | AT4G22510 | 0.25811518 | undirected | NA | NA |
| ## | 401 | AT4G22485 | AT1G07590 | 0.28477512 | undirected | NA | NA |
| ## | 402 | AT4G22485 | AT3G12145 | 0.23291990 | undirected | NA | NA |
| ## | 403 | AT4G22485 | AT5G54770 | 0.19191946 | undirected | NA | NA |
| ## | 404 | AT4G22485 | AT1G67090 | 0.28998240 | undirected | NA | NA |
| ## | 405 | AT4G22485 | AT1G62500 | 0.26686922 | undirected | NA | NA |
| ## | 406 | AT4G22485 | AT2G38540 | 0.15677718 | undirected | NA | NA |
| ## | 407 | AT4G22485 | AT1G13710 | 0.31990676 | undirected | NA | NA |
| ## | 408 | AT4G22485 | AT4G03210 | 0.21027907 | undirected | NA | NA |
| ## | 409 | AT4G22485 | AT3G22121 | 0.30162904 | undirected | NA | NA |
| ## | 410 | AT4G22485 | AT5G09220 | 0.20339333 | undirected | NA | NA |
| ## | 411 | AT4G22485 | AT4G22517 | 0.16418825 | undirected | NA | NA |
| ## | 412 | AT4G22485 | AT3G16640 | 0.27347079 | undirected | NA | NA |
| ## | 413 | AT4G22485 | AT4G34870 | 0.25210835 | undirected | NA | NA |
| ## | 414 | AT4G22485 | AT4G29030 | 0.13259062 | undirected | NA | NA |
| ## | 415 | AT4G22485 | AT2G02100 | 0.29206145 | undirected | NA | NA |
| ## | 416 | AT4G22485 | AT3G05727 | 0.35317450 | undirected | NA | NA |
| ## | 417 | AT4G22485 | AT5G27850 | 0.31618521 | undirected | NA | NA |
| ## | 418 | AT4G22485 | AT1G43170 | 0.20505954 | undirected | NA | NA |
| ## | 419 | AT4G22485 | AT4G22495 | 0.26813878 | undirected | NA | NA |
| ## | 420 | AT4G22485 | AT3G09200 | 0.20741308 | undirected | NA | NA |
| ## | 421 | AT4G22485 | AT1G14320 | 0.22604655 | undirected | NA | NA |
| ## | 422 | AT4G22485 | AT1G13930 | 0.25394191 | undirected | NA | NA |
| ## | 423 | AT4G22485 | AT2G36530 | 0.15544779 | undirected | NA | NA |
| ## | 424 | AT4G22485 | AT3G49910 | 0.19783593 | undirected | NA | NA |
| ## | 425 | AT4G22485 | AT2G34480 | 0.28677146 | undirected | NA | NA |
| ## | 426 | AT4G22485 | AT5G02960 | 0.25541893 | undirected | NA | NA |
| ## | 427 | AT4G22485 | AT2G18020 | 0.21715143 | undirected | NA | NA |
| ## | 428 | AT4G22485 | AT1G13440 | 0.33564168 | undirected | NA | NA |
| ## | 429 | AT4G22485 | AT2G16600 | 0.25674804 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 430 | AT4G22485 | AT1G07920 | 0.21659660 | undirected | NA | NA |
| ## 431 | AT4G22485 | AT1G04410 | 0.23542749 | undirected | NA | NA |
| ## 432 | AT4G22485 | AT2G36830 | 0.27973207 | undirected | NA | NA |
| ## 433 | AT4G22485 | AT3G15353 | 0.19333679 | undirected | NA | NA |
| ## 434 | AT4G22485 | AT1G62480 | 0.26268408 | undirected | NA | NA |
| ## 435 | AT4G22485 | AT5G38940 | 0.32572068 | undirected | NA | NA |
| ## 436 | AT4G22485 | ATCG01180 | 0.27270449 | undirected | NA | NA |
| ## 437 | AT4G22485 | AT1G07930 | 0.29671955 | undirected | NA | NA |
| ## 438 | AT4G22485 | ATCG00950 | 0.28311227 | undirected | NA | NA |
| ## 439 | AT4G22485 | AT3G13920 | 0.23484001 | undirected | NA | NA |
| ## 440 | AT4G22485 | AT1G28290 | 0.18662864 | undirected | NA | NA |
| ## 441 | AT4G22485 | AT1G04270 | 0.28861935 | undirected | NA | NA |
| ## 442 | AT4G22485 | AT4G35100 | 0.35040385 | undirected | NA | NA |
| ## 443 | AT4G22485 | AT5G48480 | 0.27038844 | undirected | NA | NA |
| ## 444 | AT4G22485 | AT1G52400 | 0.14040961 | undirected | NA | NA |
| ## 445 | AT4G22485 | AT3G02470 | 0.10579456 | undirected | NA | NA |
| ## 446 | AT4G22485 | AT5G15200 | 0.37803192 | undirected | NA | NA |
| ## 447 | AT4G22485 | AT5G48485 | 0.24428356 | undirected | NA | NA |
| ## 448 | AT4G22485 | AT1G20620 | 0.28012205 | undirected | NA | NA |
| ## 449 | AT4G22485 | AT2G27720 | 0.23328955 | undirected | NA | NA |
| ## 450 | AT4G22485 | AT5G02870 | 0.18706861 | undirected | NA | NA |
| ## 451 | AT4G22485 | AT4G15000 | 0.36101229 | undirected | NA | NA |
| ## 452 | AT4G22485 | AT5G20290 | 0.17374433 | undirected | NA | NA |
| ## 453 | AT4G22485 | AT4G31700 | 0.20055834 | undirected | NA | NA |
| ## 454 | AT4G22485 | AT3G04400 | 0.14681817 | undirected | NA | NA |
| ## 455 | AT4G22485 | AT3G02230 | 0.22691487 | undirected | NA | NA |
| ## 456 | AT4G22485 | AT1G54410 | 0.34424003 | undirected | NA | NA |
| ## 457 | AT4G22485 | AT3G24830 | 0.31481762 | undirected | NA | NA |
| ## 458 | AT4G22485 | AT1G48920 | 0.13036756 | undirected | NA | NA |
| ## 459 | AT4G22485 | AT3G08770 | 0.26636893 | undirected | NA | NA |
| ## 460 | AT4G22485 | AT3G05590 | 0.35181448 | undirected | NA | NA |
| ## 461 | AT4G22485 | AT4G38680 | 0.26526123 | undirected | NA | NA |
| ## 462 | AT4G22485 | AT3G04840 | 0.22644981 | undirected | NA | NA |
| ## 463 | AT4G22485 | AT2G28790 | 0.16731430 | undirected | NA | NA |
| ## 464 | AT4G22485 | AT1G70600 | 0.23865074 | undirected | NA | NA |
| ## 465 | AT4G22485 | AT4G27090 | 0.27160723 | undirected | NA | NA |
| ## 466 | AT4G22485 | AT1G77510 | 0.26602680 | undirected | NA | NA |
| ## 467 | AT4G22485 | AT1G70830 | 0.08883233 | undirected | NA | NA |
| ## 468 | AT4G22485 | AT1G15690 | 0.15176481 | undirected | NA | NA |
| ## 469 | AT4G22485 | AT3G52590 | 0.05700274 | undirected | NA | NA |
| ## 470 | AT4G22485 | AT5G07090 | 0.22182502 | undirected | NA | NA |
| ## 471 | AT4G22485 | AT5G17920 | 0.09694794 | undirected | NA | NA |
| ## 472 | AT4G22485 | AT5G56030 | 0.29026834 | undirected | NA | NA |
| ## 473 | AT4G22485 | AT2G41840 | 0.26617940 | undirected | NA | NA |
| ## 474 | AT4G22485 | AT3G60245 | 0.30371678 | undirected | NA | NA |
| ## 475 | AT4G22485 | AT2G08665 | 0.23897730 | undirected | NA | NA |
| ## 476 | AT4G22485 | AT2G42840 | 0.25020051 | undirected | NA | NA |
| ## 477 | AT4G22485 | AT1G72370 | 0.21205016 | undirected | NA | NA |
| ## 478 | AT4G22485 | AT2G05520 | 0.32341990 | undirected | NA | NA |
| ## 479 | AT4G22485 | AT4G22513 | 0.29968736 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 480 | AT4G22485 | AT4G22530 | 0.26153265 | undirected | NA | NA |
| ## 481 | AT4G22485 | ATCG01210 | 0.22251807 | undirected | NA | NA |
| ## 482 | AT4G22485 | AT3G25520 | 0.25427815 | undirected | NA | NA |
| ## 483 | AT4G22505 | AT5G60390 | 0.22059236 | undirected | NA | NA |
| ## 484 | AT4G22505 | AT1G56070 | 0.13910142 | undirected | NA | NA |
| ## 485 | AT4G22505 | AT5G02380 | 0.23811747 | undirected | NA | NA |
| ## 486 | AT4G22505 | AT4G22475 | 0.09390618 | undirected | NA | NA |
| ## 487 | AT4G22505 | AT5G02500 | 0.22620059 | undirected | NA | NA |
| ## 488 | AT4G22505 | AT4G22490 | 0.04559776 | undirected | NA | NA |
| ## 489 | AT4G22505 | AT4G21960 | 0.23499370 | undirected | NA | NA |
| ## 490 | AT4G22505 | AT2G30860 | 0.25421560 | undirected | NA | NA |
| ## 491 | AT4G22505 | AT3G08580 | 0.07872641 | undirected | NA | NA |
| ## 492 | AT4G22505 | AT1G78370 | 0.17692300 | undirected | NA | NA |
| ## 493 | AT4G22505 | AT4G22510 | 0.12144060 | undirected | NA | NA |
| ## 494 | AT4G22505 | AT1G07590 | 0.14948709 | undirected | NA | NA |
| ## 495 | AT4G22505 | AT3G12145 | 0.14021616 | undirected | NA | NA |
| ## 496 | AT4G22505 | AT5G54770 | 0.04317072 | undirected | NA | NA |
| ## 497 | AT4G22505 | AT1G67090 | 0.10380587 | undirected | NA | NA |
| ## 498 | AT4G22505 | AT1G62500 | 0.23075460 | undirected | NA | NA |
| ## 499 | AT4G22505 | AT2G38540 | 0.31318201 | undirected | NA | NA |
| ## 500 | AT4G22505 | AT1G13710 | 0.10773562 | undirected | NA | NA |
| ## 501 | AT4G22505 | AT4G03210 | 0.04361116 | undirected | NA | NA |
| ## 502 | AT4G22505 | AT3G22121 | 0.13227696 | undirected | NA | NA |
| ## 503 | AT4G22505 | AT5G09220 | 0.17153346 | undirected | NA | NA |
| ## 504 | AT4G22505 | AT4G22517 | 0.24239751 | undirected | NA | NA |
| ## 505 | AT4G22505 | AT3G16640 | 0.12012502 | undirected | NA | NA |
| ## 506 | AT4G22505 | AT4G34870 | 0.26207045 | undirected | NA | NA |
| ## 507 | AT4G22505 | AT4G29030 | 0.30492787 | undirected | NA | NA |
| ## 508 | AT4G22505 | AT2G02100 | 0.19787937 | undirected | NA | NA |
| ## 509 | AT4G22505 | AT3G05727 | 0.12658698 | undirected | NA | NA |
| ## 510 | AT4G22505 | AT5G27850 | 0.11916280 | undirected | NA | NA |
| ## 511 | AT4G22505 | AT4G22495 | 0.27107265 | undirected | NA | NA |
| ## 512 | AT4G22505 | AT3G09200 | 0.09294631 | undirected | NA | NA |
| ## 513 | AT4G22505 | AT1G14320 | 0.24686997 | undirected | NA | NA |
| ## 514 | AT4G22505 | AT1G13930 | 0.14657255 | undirected | NA | NA |
| ## 515 | AT4G22505 | AT2G36530 | 0.27008613 | undirected | NA | NA |
| ## 516 | AT4G22505 | AT3G49910 | 0.19425174 | undirected | NA | NA |
| ## 517 | AT4G22505 | AT2G34480 | 0.23097053 | undirected | NA | NA |
| ## 518 | AT4G22505 | AT5G02960 | 0.09749274 | undirected | NA | NA |
| ## 519 | AT4G22505 | AT2G18020 | 0.13859932 | undirected | NA | NA |
| ## 520 | AT4G22505 | AT1G13440 | 0.17310949 | undirected | NA | NA |
| ## 521 | AT4G22505 | AT2G16600 | 0.11431131 | undirected | NA | NA |
| ## 522 | AT4G22505 | AT1G07920 | 0.05022477 | undirected | NA | NA |
| ## 523 | AT4G22505 | AT1G04410 | 0.31207696 | undirected | NA | NA |
| ## 524 | AT4G22505 | AT2G36830 | 0.12217698 | undirected | NA | NA |
| ## 525 | AT4G22505 | AT3G15353 | 0.29728809 | undirected | NA | NA |
| ## 526 | AT4G22505 | AT1G62480 | 0.27375707 | undirected | NA | NA |
| ## 527 | AT4G22505 | AT5G38940 | 0.10822869 | undirected | NA | NA |
| ## 528 | AT4G22505 | ATCG01180 | 0.24740508 | undirected | NA | NA |
| ## 529 | AT4G22505 | AT1G07930 | 0.15358877 | undirected | NA | NA |

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|----|-----|-----------|-----------|------------|------------|----|----|
| ## | 530 | AT4G22505 | ATCG00950 | 0.20335620 | undirected | NA | NA |
| ## | 531 | AT4G22505 | AT3G13920 | 0.06126024 | undirected | NA | NA |
| ## | 532 | AT4G22505 | AT1G28290 | 0.04101096 | undirected | NA | NA |
| ## | 533 | AT4G22505 | AT1G04270 | 0.18509313 | undirected | NA | NA |
| ## | 534 | AT4G22505 | AT4G35100 | 0.18319064 | undirected | NA | NA |
| ## | 535 | AT4G22505 | AT5G48480 | 0.14838360 | undirected | NA | NA |
| ## | 536 | AT4G22505 | AT3G02470 | 0.11481007 | undirected | NA | NA |
| ## | 537 | AT4G22505 | AT5G15200 | 0.12765238 | undirected | NA | NA |
| ## | 538 | AT4G22505 | AT5G48485 | 0.23500423 | undirected | NA | NA |
| ## | 539 | AT4G22505 | AT1G20620 | 0.12856803 | undirected | NA | NA |
| ## | 540 | AT4G22505 | AT2G27720 | 0.13852742 | undirected | NA | NA |
| ## | 541 | AT4G22505 | AT5G02870 | 0.04222293 | undirected | NA | NA |
| ## | 542 | AT4G22505 | AT4G15000 | 0.16989094 | undirected | NA | NA |
| ## | 543 | AT4G22505 | AT5G20290 | 0.20123249 | undirected | NA | NA |
| ## | 544 | AT4G22505 | AT4G31700 | 0.02495198 | undirected | NA | NA |
| ## | 545 | AT4G22505 | AT3G04400 | 0.19093197 | undirected | NA | NA |
| ## | 546 | AT4G22505 | AT3G02230 | 0.10299981 | undirected | NA | NA |
| ## | 547 | AT4G22505 | AT1G54410 | 0.19530696 | undirected | NA | NA |
| ## | 548 | AT4G22505 | AT3G24830 | 0.11033978 | undirected | NA | NA |
| ## | 549 | AT4G22505 | AT1G48920 | 0.22955241 | undirected | NA | NA |
| ## | 550 | AT4G22505 | AT3G08770 | 0.22071423 | undirected | NA | NA |
| ## | 551 | AT4G22505 | AT3G05590 | 0.08117380 | undirected | NA | NA |
| ## | 552 | AT4G22505 | AT4G38680 | 0.24803609 | undirected | NA | NA |
| ## | 553 | AT4G22505 | AT3G04840 | 0.18798938 | undirected | NA | NA |
| ## | 554 | AT4G22505 | AT2G28790 | 0.20928005 | undirected | NA | NA |
| ## | 555 | AT4G22505 | AT1G70600 | 0.08903750 | undirected | NA | NA |
| ## | 556 | AT4G22505 | AT4G27090 | 0.26328082 | undirected | NA | NA |
| ## | 557 | AT4G22505 | AT1G77510 | 0.11639773 | undirected | NA | NA |
| ## | 558 | AT4G22505 | AT1G70830 | 0.05706649 | undirected | NA | NA |
| ## | 559 | AT4G22505 | AT1G15690 | 0.02450269 | undirected | NA | NA |
| ## | 560 | AT4G22505 | AT5G07090 | 0.04562968 | undirected | NA | NA |
| ## | 561 | AT4G22505 | AT5G17920 | 0.08763932 | undirected | NA | NA |
| ## | 562 | AT4G22505 | AT5G56030 | 0.14197933 | undirected | NA | NA |
| ## | 563 | AT4G22505 | AT2G41840 | 0.17635405 | undirected | NA | NA |
| ## | 564 | AT4G22505 | AT3G60245 | 0.13694814 | undirected | NA | NA |
| ## | 565 | AT4G22505 | AT2G08665 | 0.02951147 | undirected | NA | NA |
| ## | 566 | AT4G22505 | AT3G26520 | 0.07683563 | undirected | NA | NA |
| ## | 567 | AT4G22505 | AT2G42840 | 0.28651986 | undirected | NA | NA |
| ## | 568 | AT4G22505 | AT1G72370 | 0.26145706 | undirected | NA | NA |
| ## | 569 | AT4G22505 | AT2G05520 | 0.18586383 | undirected | NA | NA |
| ## | 570 | AT4G22505 | AT4G22513 | 0.13281327 | undirected | NA | NA |
| ## | 571 | AT4G22505 | AT4G22530 | 0.18956317 | undirected | NA | NA |
| ## | 572 | AT4G22505 | ATCG01210 | 0.20378596 | undirected | NA | NA |
| ## | 573 | AT4G22505 | AT3G25520 | 0.05281721 | undirected | NA | NA |
| ## | 574 | AT5G60390 | AT1G56070 | 0.05189457 | undirected | NA | NA |
| ## | 575 | AT5G60390 | AT5G02380 | 0.09567341 | undirected | NA | NA |
| ## | 576 | AT5G60390 | AT5G02500 | 0.10245567 | undirected | NA | NA |
| ## | 577 | AT5G60390 | AT4G21960 | 0.23282375 | undirected | NA | NA |
| ## | 578 | AT5G60390 | AT2G30860 | 0.11643007 | undirected | NA | NA |
| ## | 579 | AT5G60390 | AT1G78370 | 0.07856874 | undirected | NA | NA |

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|----|-----|-----------|-----------|------------|------------|----|----|
| ## | 580 | AT5G60390 | AT4G22510 | 0.02998504 | undirected | NA | NA |
| ## | 581 | AT5G60390 | AT1G07590 | 0.05415413 | undirected | NA | NA |
| ## | 582 | AT5G60390 | AT3G12145 | 0.04629060 | undirected | NA | NA |
| ## | 583 | AT5G60390 | AT1G62500 | 0.10797729 | undirected | NA | NA |
| ## | 584 | AT5G60390 | AT2G38540 | 0.20646249 | undirected | NA | NA |
| ## | 585 | AT5G60390 | AT1G13710 | 0.02088492 | undirected | NA | NA |
| ## | 586 | AT5G60390 | AT3G22121 | 0.04149583 | undirected | NA | NA |
| ## | 587 | AT5G60390 | AT5G09220 | 0.10403795 | undirected | NA | NA |
| ## | 588 | AT5G60390 | AT4G22517 | 0.23044782 | undirected | NA | NA |
| ## | 589 | AT5G60390 | AT3G16640 | 0.02369293 | undirected | NA | NA |
| ## | 590 | AT5G60390 | AT4G34870 | 0.14847418 | undirected | NA | NA |
| ## | 591 | AT5G60390 | AT4G29030 | 0.20213844 | undirected | NA | NA |
| ## | 592 | AT5G60390 | AT2G02100 | 0.08088329 | undirected | NA | NA |
| ## | 593 | AT5G60390 | AT5G27850 | 0.02424064 | undirected | NA | NA |
| ## | 594 | AT5G60390 | AT4G22495 | 0.14512168 | undirected | NA | NA |
| ## | 595 | AT5G60390 | AT1G14320 | 0.16767287 | undirected | NA | NA |
| ## | 596 | AT5G60390 | AT1G13930 | 0.05554161 | undirected | NA | NA |
| ## | 597 | AT5G60390 | AT2G36530 | 0.19202648 | undirected | NA | NA |
| ## | 598 | AT5G60390 | AT3G49910 | 0.13113819 | undirected | NA | NA |
| ## | 599 | AT5G60390 | AT2G34480 | 0.07631832 | undirected | NA | NA |
| ## | 600 | AT5G60390 | AT2G18020 | 0.04134265 | undirected | NA | NA |
| ## | 601 | AT5G60390 | AT1G13440 | 0.03942754 | undirected | NA | NA |
| ## | 602 | AT5G60390 | AT2G16600 | 0.03384995 | undirected | NA | NA |
| ## | 603 | AT5G60390 | AT1G04410 | 0.17467387 | undirected | NA | NA |
| ## | 604 | AT5G60390 | AT2G36830 | 0.02988430 | undirected | NA | NA |
| ## | 605 | AT5G60390 | AT3G15353 | 0.21570498 | undirected | NA | NA |
| ## | 606 | AT5G60390 | AT1G62480 | 0.15984673 | undirected | NA | NA |
| ## | 607 | AT5G60390 | ATCG01180 | 0.09927861 | undirected | NA | NA |
| ## | 608 | AT5G60390 | AT1G07930 | 0.04377804 | undirected | NA | NA |
| ## | 609 | AT5G60390 | ATCG00950 | 0.07725949 | undirected | NA | NA |
| ## | 610 | AT5G60390 | AT1G04270 | 0.05917073 | undirected | NA | NA |
| ## | 611 | AT5G60390 | AT4G35100 | 0.05528130 | undirected | NA | NA |
| ## | 612 | AT5G60390 | AT5G48480 | 0.04715533 | undirected | NA | NA |
| ## | 613 | AT5G60390 | AT3G02470 | 0.13154454 | undirected | NA | NA |
| ## | 614 | AT5G60390 | AT5G48485 | 0.12221493 | undirected | NA | NA |
| ## | 615 | AT5G60390 | AT1G20620 | 0.03464562 | undirected | NA | NA |
| ## | 616 | AT5G60390 | AT2G27720 | 0.05630022 | undirected | NA | NA |
| ## | 617 | AT5G60390 | AT4G15000 | 0.03906336 | undirected | NA | NA |
| ## | 618 | AT5G60390 | AT5G20290 | 0.10233510 | undirected | NA | NA |
| ## | 619 | AT5G60390 | AT3G04400 | 0.09415363 | undirected | NA | NA |
| ## | 620 | AT5G60390 | AT3G02230 | 0.02079362 | undirected | NA | NA |
| ## | 621 | AT5G60390 | AT1G54410 | 0.05635233 | undirected | NA | NA |
| ## | 622 | AT5G60390 | AT3G24830 | 0.02295083 | undirected | NA | NA |
| ## | 623 | AT5G60390 | AT1G48920 | 0.11543034 | undirected | NA | NA |
| ## | 624 | AT5G60390 | AT3G08770 | 0.09186445 | undirected | NA | NA |
| ## | 625 | AT5G60390 | AT4G38680 | 0.10598441 | undirected | NA | NA |
| ## | 626 | AT5G60390 | AT3G04840 | 0.12998853 | undirected | NA | NA |
| ## | 627 | AT5G60390 | AT2G28790 | 0.18386755 | undirected | NA | NA |
| ## | 628 | AT5G60390 | AT4G27090 | 0.10601166 | undirected | NA | NA |
| ## | 629 | AT5G60390 | AT1G77510 | 0.03183471 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 630 | AT5G60390 | AT1G70830 | 0.06255181 | undirected | NA | NA |
| ## 631 | AT5G60390 | AT3G52590 | 0.02299610 | undirected | NA | NA |
| ## 632 | AT5G60390 | AT5G17920 | 0.13401340 | undirected | NA | NA |
| ## 633 | AT5G60390 | AT5G56030 | 0.03250431 | undirected | NA | NA |
| ## 634 | AT5G60390 | AT2G41840 | 0.07864267 | undirected | NA | NA |
| ## 635 | AT5G60390 | AT3G60245 | 0.04006811 | undirected | NA | NA |
| ## 636 | AT5G60390 | AT3G26520 | 0.07505859 | undirected | NA | NA |
| ## 637 | AT5G60390 | AT2G42840 | 0.17124291 | undirected | NA | NA |
| ## 638 | AT5G60390 | AT1G72370 | 0.15332250 | undirected | NA | NA |
| ## 639 | AT5G60390 | AT2G05520 | 0.05248699 | undirected | NA | NA |
| ## 640 | AT5G60390 | AT4G22513 | 0.03307418 | undirected | NA | NA |
| ## 641 | AT5G60390 | AT4G22530 | 0.06617491 | undirected | NA | NA |
| ## 642 | AT5G60390 | ATCG01210 | 0.10220965 | undirected | NA | NA |
| ## 643 | AT1G56070 | AT5G02380 | 0.08346748 | undirected | NA | NA |
| ## 644 | AT1G56070 | AT5G02500 | 0.04001563 | undirected | NA | NA |
| ## 645 | AT1G56070 | AT4G21960 | 0.05979255 | undirected | NA | NA |
| ## 646 | AT1G56070 | AT2G30860 | 0.05785649 | undirected | NA | NA |
| ## 647 | AT1G56070 | AT1G78370 | 0.15446389 | undirected | NA | NA |
| ## 648 | AT1G56070 | AT1G62500 | 0.03519410 | undirected | NA | NA |
| ## 649 | AT1G56070 | AT2G38540 | 0.10558922 | undirected | NA | NA |
| ## 650 | AT1G56070 | AT5G09220 | 0.03917350 | undirected | NA | NA |
| ## 651 | AT1G56070 | AT4G22517 | 0.08469234 | undirected | NA | NA |
| ## 652 | AT1G56070 | AT4G34870 | 0.05841027 | undirected | NA | NA |
| ## 653 | AT1G56070 | AT4G29030 | 0.14098884 | undirected | NA | NA |
| ## 654 | AT1G56070 | AT2G02100 | 0.02288956 | undirected | NA | NA |
| ## 655 | AT1G56070 | AT3G05727 | 0.02522619 | undirected | NA | NA |
| ## 656 | AT1G56070 | AT4G22495 | 0.05981759 | undirected | NA | NA |
| ## 657 | AT1G56070 | AT1G14320 | 0.04967735 | undirected | NA | NA |
| ## 658 | AT1G56070 | AT1G13930 | 0.02139427 | undirected | NA | NA |
| ## 659 | AT1G56070 | AT2G36530 | 0.11807102 | undirected | NA | NA |
| ## 660 | AT1G56070 | AT3G49910 | 0.03231755 | undirected | NA | NA |
| ## 661 | AT1G56070 | AT2G34480 | 0.04821776 | undirected | NA | NA |
| ## 662 | AT1G56070 | AT1G13440 | 0.03337457 | undirected | NA | NA |
| ## 663 | AT1G56070 | AT1G04410 | 0.10777708 | undirected | NA | NA |
| ## 664 | AT1G56070 | AT2G36830 | 0.02741025 | undirected | NA | NA |
| ## 665 | AT1G56070 | AT3G15353 | 0.10896715 | undirected | NA | NA |
| ## 666 | AT1G56070 | AT1G62480 | 0.06010323 | undirected | NA | NA |
| ## 667 | AT1G56070 | ATCG01180 | 0.05233084 | undirected | NA | NA |
| ## 668 | AT1G56070 | AT1G07930 | 0.06451560 | undirected | NA | NA |
| ## 669 | AT1G56070 | ATCG00950 | 0.02927376 | undirected | NA | NA |
| ## 670 | AT1G56070 | AT1G04270 | 0.03495536 | undirected | NA | NA |
| ## 671 | AT1G56070 | AT4G35100 | 0.02087151 | undirected | NA | NA |
| ## 672 | AT1G56070 | AT5G48480 | 0.02868574 | undirected | NA | NA |
| ## 673 | AT1G56070 | AT3G02470 | 0.02342176 | undirected | NA | NA |
| ## 674 | AT1G56070 | AT5G48485 | 0.04028635 | undirected | NA | NA |
| ## 675 | AT1G56070 | AT1G20620 | 0.03262628 | undirected | NA | NA |
| ## 676 | AT1G56070 | AT2G27720 | 0.02209462 | undirected | NA | NA |
| ## 677 | AT1G56070 | AT4G15000 | 0.02434495 | undirected | NA | NA |
| ## 678 | AT1G56070 | AT5G20290 | 0.07363968 | undirected | NA | NA |
| ## 679 | AT1G56070 | AT3G04400 | 0.09354639 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 680 | AT1G56070 | AT1G54410 | 0.03089627 | undirected | NA | NA |
| ## 681 | AT1G56070 | AT1G48920 | 0.07427303 | undirected | NA | NA |
| ## 682 | AT1G56070 | AT3G08770 | 0.04908045 | undirected | NA | NA |
| ## 683 | AT1G56070 | AT4G38680 | 0.04413756 | undirected | NA | NA |
| ## 684 | AT1G56070 | AT3G04840 | 0.04969451 | undirected | NA | NA |
| ## 685 | AT1G56070 | AT2G28790 | 0.06380003 | undirected | NA | NA |
| ## 686 | AT1G56070 | AT4G27090 | 0.04775949 | undirected | NA | NA |
| ## 687 | AT1G56070 | AT1G77510 | 0.02389672 | undirected | NA | NA |
| ## 688 | AT1G56070 | AT3G60245 | 0.04258830 | undirected | NA | NA |
| ## 689 | AT1G56070 | AT2G42840 | 0.06321131 | undirected | NA | NA |
| ## 690 | AT1G56070 | AT1G72370 | 0.12174107 | undirected | NA | NA |
| ## 691 | AT1G56070 | AT2G05520 | 0.02373966 | undirected | NA | NA |
| ## 692 | AT1G56070 | AT4G22530 | 0.02853783 | undirected | NA | NA |
| ## 693 | AT1G56070 | ATCG01210 | 0.02836833 | undirected | NA | NA |
| ## 694 | AT5G02380 | AT4G22475 | 0.27846145 | undirected | NA | NA |
| ## 695 | AT5G02380 | AT5G02500 | 0.28392114 | undirected | NA | NA |
| ## 696 | AT5G02380 | AT4G22490 | 0.18369690 | undirected | NA | NA |
| ## 697 | AT5G02380 | AT4G21960 | 0.13788283 | undirected | NA | NA |
| ## 698 | AT5G02380 | AT2G30860 | 0.27313824 | undirected | NA | NA |
| ## 699 | AT5G02380 | AT3G08580 | 0.26518687 | undirected | NA | NA |
| ## 700 | AT5G02380 | AT1G78370 | 0.13889395 | undirected | NA | NA |
| ## 701 | AT5G02380 | AT4G22510 | 0.26932372 | undirected | NA | NA |
| ## 702 | AT5G02380 | AT1G07590 | 0.29021456 | undirected | NA | NA |
| ## 703 | AT5G02380 | AT3G12145 | 0.24996634 | undirected | NA | NA |
| ## 704 | AT5G02380 | AT5G54770 | 0.13478258 | undirected | NA | NA |
| ## 705 | AT5G02380 | AT1G67090 | 0.26797966 | undirected | NA | NA |
| ## 706 | AT5G02380 | AT1G62500 | 0.31587931 | undirected | NA | NA |
| ## 707 | AT5G02380 | AT2G38540 | 0.24215316 | undirected | NA | NA |
| ## 708 | AT5G02380 | AT1G13710 | 0.28242982 | undirected | NA | NA |
| ## 709 | AT5G02380 | AT4G03210 | 0.16653691 | undirected | NA | NA |
| ## 710 | AT5G02380 | AT3G22121 | 0.29136259 | undirected | NA | NA |
| ## 711 | AT5G02380 | AT5G09220 | 0.16575377 | undirected | NA | NA |
| ## 712 | AT5G02380 | AT4G22517 | 0.20559104 | undirected | NA | NA |
| ## 713 | AT5G02380 | AT3G16640 | 0.26426686 | undirected | NA | NA |
| ## 714 | AT5G02380 | AT4G34870 | 0.22094369 | undirected | NA | NA |
| ## 715 | AT5G02380 | AT4G29030 | 0.22495499 | undirected | NA | NA |
| ## 716 | AT5G02380 | AT2G02100 | 0.31912851 | undirected | NA | NA |
| ## 717 | AT5G02380 | AT3G05727 | 0.33298291 | undirected | NA | NA |
| ## 718 | AT5G02380 | AT5G27850 | 0.30401806 | undirected | NA | NA |
| ## 719 | AT5G02380 | AT1G43170 | 0.09869951 | undirected | NA | NA |
| ## 720 | AT5G02380 | AT4G22495 | 0.27260449 | undirected | NA | NA |
| ## 721 | AT5G02380 | AT3G09200 | 0.17813692 | undirected | NA | NA |
| ## 722 | AT5G02380 | AT1G14320 | 0.20650433 | undirected | NA | NA |
| ## 723 | AT5G02380 | AT1G13930 | 0.27690612 | undirected | NA | NA |
| ## 724 | AT5G02380 | AT2G36530 | 0.21929763 | undirected | NA | NA |
| ## 725 | AT5G02380 | AT3G49910 | 0.20258496 | undirected | NA | NA |
| ## 726 | AT5G02380 | AT2G34480 | 0.33253223 | undirected | NA | NA |
| ## 727 | AT5G02380 | AT5G02960 | 0.23574516 | undirected | NA | NA |
| ## 728 | AT5G02380 | AT2G18020 | 0.24661340 | undirected | NA | NA |
| ## 729 | AT5G02380 | AT1G13440 | 0.34860599 | undirected | NA | NA |

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|----|-----|-----------|-----------|------------|------------|----|----|
| ## | 730 | AT5G02380 | AT2G16600 | 0.24917242 | undirected | NA | NA |
| ## | 731 | AT5G02380 | AT1G07920 | 0.18006361 | undirected | NA | NA |
| ## | 732 | AT5G02380 | AT1G04410 | 0.25977764 | undirected | NA | NA |
| ## | 733 | AT5G02380 | AT2G36830 | 0.28103190 | undirected | NA | NA |
| ## | 734 | AT5G02380 | AT3G15353 | 0.24661642 | undirected | NA | NA |
| ## | 735 | AT5G02380 | AT1G62480 | 0.25873548 | undirected | NA | NA |
| ## | 736 | AT5G02380 | AT5G38940 | 0.29972526 | undirected | NA | NA |
| ## | 737 | AT5G02380 | ATCG01180 | 0.30702401 | undirected | NA | NA |
| ## | 738 | AT5G02380 | AT1G07930 | 0.23773379 | undirected | NA | NA |
| ## | 739 | AT5G02380 | ATCG00950 | 0.31451433 | undirected | NA | NA |
| ## | 740 | AT5G02380 | AT3G13920 | 0.18840011 | undirected | NA | NA |
| ## | 741 | AT5G02380 | AT1G28290 | 0.11181719 | undirected | NA | NA |
| ## | 742 | AT5G02380 | AT1G04270 | 0.31464523 | undirected | NA | NA |
| ## | 743 | AT5G02380 | AT4G35100 | 0.36626291 | undirected | NA | NA |
| ## | 744 | AT5G02380 | AT5G48480 | 0.27355118 | undirected | NA | NA |
| ## | 745 | AT5G02380 | AT1G52400 | 0.08052989 | undirected | NA | NA |
| ## | 746 | AT5G02380 | AT3G02470 | 0.12151164 | undirected | NA | NA |
| ## | 747 | AT5G02380 | AT5G15200 | 0.34627434 | undirected | NA | NA |
| ## | 748 | AT5G02380 | AT5G48485 | 0.27932554 | undirected | NA | NA |
| ## | 749 | AT5G02380 | AT1G20620 | 0.25064972 | undirected | NA | NA |
| ## | 750 | AT5G02380 | AT2G27720 | 0.22201714 | undirected | NA | NA |
| ## | 751 | AT5G02380 | AT5G02870 | 0.14278730 | undirected | NA | NA |
| ## | 752 | AT5G02380 | AT4G15000 | 0.36524739 | undirected | NA | NA |
| ## | 753 | AT5G02380 | AT5G20290 | 0.20510151 | undirected | NA | NA |
| ## | 754 | AT5G02380 | AT4G31700 | 0.10365949 | undirected | NA | NA |
| ## | 755 | AT5G02380 | AT3G04400 | 0.17742743 | undirected | NA | NA |
| ## | 756 | AT5G02380 | AT3G02230 | 0.22819280 | undirected | NA | NA |
| ## | 757 | AT5G02380 | AT1G54410 | 0.36858850 | undirected | NA | NA |
| ## | 758 | AT5G02380 | AT3G24830 | 0.28323266 | undirected | NA | NA |
| ## | 759 | AT5G02380 | AT1G48920 | 0.17486937 | undirected | NA | NA |
| ## | 760 | AT5G02380 | AT3G08770 | 0.23405780 | undirected | NA | NA |
| ## | 761 | AT5G02380 | AT3G05590 | 0.28701334 | undirected | NA | NA |
| ## | 762 | AT5G02380 | AT4G38680 | 0.31711650 | undirected | NA | NA |
| ## | 763 | AT5G02380 | AT3G04840 | 0.17924456 | undirected | NA | NA |
| ## | 764 | AT5G02380 | AT2G28790 | 0.20980523 | undirected | NA | NA |
| ## | 765 | AT5G02380 | AT1G70600 | 0.22565811 | undirected | NA | NA |
| ## | 766 | AT5G02380 | AT4G27090 | 0.33513219 | undirected | NA | NA |
| ## | 767 | AT5G02380 | AT1G77510 | 0.25009629 | undirected | NA | NA |
| ## | 768 | AT5G02380 | AT1G70830 | 0.08513647 | undirected | NA | NA |
| ## | 769 | AT5G02380 | AT1G15690 | 0.07233758 | undirected | NA | NA |
| ## | 770 | AT5G02380 | AT3G52590 | 0.03976973 | undirected | NA | NA |
| ## | 771 | AT5G02380 | AT5G07090 | 0.17256492 | undirected | NA | NA |
| ## | 772 | AT5G02380 | AT5G17920 | 0.10030437 | undirected | NA | NA |
| ## | 773 | AT5G02380 | AT5G56030 | 0.30858011 | undirected | NA | NA |
| ## | 774 | AT5G02380 | AT2G41840 | 0.28722052 | undirected | NA | NA |
| ## | 775 | AT5G02380 | AT3G60245 | 0.25564710 | undirected | NA | NA |
| ## | 776 | AT5G02380 | AT2G08665 | 0.11491583 | undirected | NA | NA |
| ## | 777 | AT5G02380 | AT3G26520 | 0.03929214 | undirected | NA | NA |
| ## | 778 | AT5G02380 | AT2G42840 | 0.24431744 | undirected | NA | NA |
| ## | 779 | AT5G02380 | AT1G72370 | 0.26175612 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 780 | AT5G02380 | AT2G05520 | 0.34744759 | undirected | NA | NA |
| ## 781 | AT5G02380 | AT4G22513 | 0.30091135 | undirected | NA | NA |
| ## 782 | AT5G02380 | AT4G22530 | 0.28949844 | undirected | NA | NA |
| ## 783 | AT5G02380 | ATCG01210 | 0.26262966 | undirected | NA | NA |
| ## 784 | AT5G02380 | AT3G25520 | 0.13463631 | undirected | NA | NA |
| ## 785 | AT4G22475 | AT5G02500 | 0.28443712 | undirected | NA | NA |
| ## 786 | AT4G22475 | AT4G22490 | 0.27380731 | undirected | NA | NA |
| ## 787 | AT4G22475 | AT4G21960 | 0.03704952 | undirected | NA | NA |
| ## 788 | AT4G22475 | AT2G30860 | 0.29378717 | undirected | NA | NA |
| ## 789 | AT4G22475 | AT3G08580 | 0.38444145 | undirected | NA | NA |
| ## 790 | AT4G22475 | AT1G78370 | 0.03957897 | undirected | NA | NA |
| ## 791 | AT4G22475 | AT4G22510 | 0.26521755 | undirected | NA | NA |
| ## 792 | AT4G22475 | AT1G07590 | 0.27330348 | undirected | NA | NA |
| ## 793 | AT4G22475 | AT3G12145 | 0.28812302 | undirected | NA | NA |
| ## 794 | AT4G22475 | AT5G54770 | 0.33427431 | undirected | NA | NA |
| ## 795 | AT4G22475 | AT1G67090 | 0.32851069 | undirected | NA | NA |
| ## 796 | AT4G22475 | AT1G62500 | 0.26773190 | undirected | NA | NA |
| ## 797 | AT4G22475 | AT2G38540 | 0.10355082 | undirected | NA | NA |
| ## 798 | AT4G22475 | AT1G13710 | 0.31150025 | undirected | NA | NA |
| ## 799 | AT4G22475 | AT4G03210 | 0.32830139 | undirected | NA | NA |
| ## 800 | AT4G22475 | AT3G22121 | 0.28582414 | undirected | NA | NA |
| ## 801 | AT4G22475 | AT5G09220 | 0.23256863 | undirected | NA | NA |
| ## 802 | AT4G22475 | AT4G22517 | 0.10976319 | undirected | NA | NA |
| ## 803 | AT4G22475 | AT3G16640 | 0.33675644 | undirected | NA | NA |
| ## 804 | AT4G22475 | AT4G34870 | 0.23157436 | undirected | NA | NA |
| ## 805 | AT4G22475 | AT4G29030 | 0.07980472 | undirected | NA | NA |
| ## 806 | AT4G22475 | AT2G02100 | 0.28002984 | undirected | NA | NA |
| ## 807 | AT4G22475 | AT3G05727 | 0.32123020 | undirected | NA | NA |
| ## 808 | AT4G22475 | AT5G27850 | 0.28926274 | undirected | NA | NA |
| ## 809 | AT4G22475 | AT1G43170 | 0.32246187 | undirected | NA | NA |
| ## 810 | AT4G22475 | AT4G22495 | 0.25738816 | undirected | NA | NA |
| ## 811 | AT4G22475 | AT3G09200 | 0.32629253 | undirected | NA | NA |
| ## 812 | AT4G22475 | AT1G14320 | 0.21617616 | undirected | NA | NA |
| ## 813 | AT4G22475 | AT1G13930 | 0.27397440 | undirected | NA | NA |
| ## 814 | AT4G22475 | AT2G36530 | 0.10307003 | undirected | NA | NA |
| ## 815 | AT4G22475 | AT3G49910 | 0.20205715 | undirected | NA | NA |
| ## 816 | AT4G22475 | AT2G34480 | 0.33250740 | undirected | NA | NA |
| ## 817 | AT4G22475 | AT5G02960 | 0.33132704 | undirected | NA | NA |
| ## 818 | AT4G22475 | AT2G18020 | 0.28425041 | undirected | NA | NA |
| ## 819 | AT4G22475 | AT1G13440 | 0.33928324 | undirected | NA | NA |
| ## 820 | AT4G22475 | AT2G16600 | 0.28248712 | undirected | NA | NA |
| ## 821 | AT4G22475 | AT1G07920 | 0.31899567 | undirected | NA | NA |
| ## 822 | AT4G22475 | AT1G04410 | 0.19837033 | undirected | NA | NA |
| ## 823 | AT4G22475 | AT2G36830 | 0.32024875 | undirected | NA | NA |
| ## 824 | AT4G22475 | AT3G15353 | 0.14394747 | undirected | NA | NA |
| ## 825 | AT4G22475 | AT1G62480 | 0.24510037 | undirected | NA | NA |
| ## 826 | AT4G22475 | AT5G38940 | 0.32143239 | undirected | NA | NA |
| ## 827 | AT4G22475 | ATCG01180 | 0.29510151 | undirected | NA | NA |
| ## 828 | AT4G22475 | AT1G07930 | 0.29393397 | undirected | NA | NA |
| ## 829 | AT4G22475 | ATCG00950 | 0.29859913 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 830 | AT4G22475 | AT3G13920 | 0.33793189 | undirected | NA | NA |
| ## 831 | AT4G22475 | AT1G28290 | 0.31072117 | undirected | NA | NA |
| ## 832 | AT4G22475 | AT1G04270 | 0.32425583 | undirected | NA | NA |
| ## 833 | AT4G22475 | AT4G35100 | 0.29975601 | undirected | NA | NA |
| ## 834 | AT4G22475 | AT5G48480 | 0.32431706 | undirected | NA | NA |
| ## 835 | AT4G22475 | AT1G52400 | 0.30022216 | undirected | NA | NA |
| ## 836 | AT4G22475 | AT3G02470 | 0.09439515 | undirected | NA | NA |
| ## 837 | AT4G22475 | AT5G15200 | 0.35744019 | undirected | NA | NA |
| ## 838 | AT4G22475 | AT5G48485 | 0.25525330 | undirected | NA | NA |
| ## 839 | AT4G22475 | AT1G20620 | 0.33548461 | undirected | NA | NA |
| ## 840 | AT4G22475 | AT2G27720 | 0.28691773 | undirected | NA | NA |
| ## 841 | AT4G22475 | AT5G02870 | 0.33998166 | undirected | NA | NA |
| ## 842 | AT4G22475 | AT4G15000 | 0.32677651 | undirected | NA | NA |
| ## 843 | AT4G22475 | AT5G20290 | 0.14592764 | undirected | NA | NA |
| ## 844 | AT4G22475 | AT4G31700 | 0.29863780 | undirected | NA | NA |
| ## 845 | AT4G22475 | AT3G04400 | 0.07213326 | undirected | NA | NA |
| ## 846 | AT4G22475 | AT3G02230 | 0.29400532 | undirected | NA | NA |
| ## 847 | AT4G22475 | AT1G54410 | 0.32116540 | undirected | NA | NA |
| ## 848 | AT4G22475 | AT3G24830 | 0.32036879 | undirected | NA | NA |
| ## 849 | AT4G22475 | AT1G48920 | 0.07358647 | undirected | NA | NA |
| ## 850 | AT4G22475 | AT3G08770 | 0.31958909 | undirected | NA | NA |
| ## 851 | AT4G22475 | AT3G05590 | 0.37568797 | undirected | NA | NA |
| ## 852 | AT4G22475 | AT4G38680 | 0.29446683 | undirected | NA | NA |
| ## 853 | AT4G22475 | AT3G04840 | 0.19573712 | undirected | NA | NA |
| ## 854 | AT4G22475 | AT2G28790 | 0.11831216 | undirected | NA | NA |
| ## 855 | AT4G22475 | AT1G70600 | 0.34003105 | undirected | NA | NA |
| ## 856 | AT4G22475 | AT4G27090 | 0.30273924 | undirected | NA | NA |
| ## 857 | AT4G22475 | AT1G77510 | 0.29367893 | undirected | NA | NA |
| ## 858 | AT4G22475 | AT1G70830 | 0.09060926 | undirected | NA | NA |
| ## 859 | AT4G22475 | AT1G15690 | 0.32210903 | undirected | NA | NA |
| ## 860 | AT4G22475 | AT3G52590 | 0.10520356 | undirected | NA | NA |
| ## 861 | AT4G22475 | AT5G07090 | 0.32485770 | undirected | NA | NA |
| ## 862 | AT4G22475 | AT5G17920 | 0.06665101 | undirected | NA | NA |
| ## 863 | AT4G22475 | AT5G56030 | 0.28631097 | undirected | NA | NA |
| ## 864 | AT4G22475 | AT2G41840 | 0.26077158 | undirected | NA | NA |
| ## 865 | AT4G22475 | AT3G60245 | 0.30783073 | undirected | NA | NA |
| ## 866 | AT4G22475 | AT2G08665 | 0.33978473 | undirected | NA | NA |
| ## 867 | AT4G22475 | AT2G42840 | 0.24305506 | undirected | NA | NA |
| ## 868 | AT4G22475 | AT1G72370 | 0.15283023 | undirected | NA | NA |
| ## 869 | AT4G22475 | AT2G05520 | 0.30778253 | undirected | NA | NA |
| ## 870 | AT4G22475 | AT4G22513 | 0.29005312 | undirected | NA | NA |
| ## 871 | AT4G22475 | AT4G22530 | 0.31306448 | undirected | NA | NA |
| ## 872 | AT4G22475 | ATCG01210 | 0.25709487 | undirected | NA | NA |
| ## 873 | AT4G22475 | AT3G25520 | 0.32702833 | undirected | NA | NA |
| ## 874 | AT5G02500 | AT4G22490 | 0.24309947 | undirected | NA | NA |
| ## 875 | AT5G02500 | AT4G21960 | 0.18801054 | undirected | NA | NA |
| ## 876 | AT5G02500 | AT2G30860 | 0.35731090 | undirected | NA | NA |
| ## 877 | AT5G02500 | AT3G08580 | 0.30885836 | undirected | NA | NA |
| ## 878 | AT5G02500 | AT1G78370 | 0.05833683 | undirected | NA | NA |
| ## 879 | AT5G02500 | AT4G22510 | 0.22739101 | undirected | NA | NA |

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|--------|-----------|-----------|------------|------------|----|----|
| ## 880 | AT5G02500 | AT1G07590 | 0.44672294 | undirected | NA | NA |
| ## 881 | AT5G02500 | AT3G12145 | 0.29445119 | undirected | NA | NA |
| ## 882 | AT5G02500 | AT5G54770 | 0.17998064 | undirected | NA | NA |
| ## 883 | AT5G02500 | AT1G67090 | 0.22951943 | undirected | NA | NA |
| ## 884 | AT5G02500 | AT1G62500 | 0.42025204 | undirected | NA | NA |
| ## 885 | AT5G02500 | AT2G38540 | 0.24954894 | undirected | NA | NA |
| ## 886 | AT5G02500 | AT1G13710 | 0.38781413 | undirected | NA | NA |
| ## 887 | AT5G02500 | AT4G03210 | 0.13938910 | undirected | NA | NA |
| ## 888 | AT5G02500 | AT3G22121 | 0.38537057 | undirected | NA | NA |
| ## 889 | AT5G02500 | AT5G09220 | 0.39067523 | undirected | NA | NA |
| ## 890 | AT5G02500 | AT4G22517 | 0.32636091 | undirected | NA | NA |
| ## 891 | AT5G02500 | AT3G16640 | 0.30821832 | undirected | NA | NA |
| ## 892 | AT5G02500 | AT4G34870 | 0.33573343 | undirected | NA | NA |
| ## 893 | AT5G02500 | AT4G29030 | 0.18174301 | undirected | NA | NA |
| ## 894 | AT5G02500 | AT2G02100 | 0.45920593 | undirected | NA | NA |
| ## 895 | AT5G02500 | AT3G05727 | 0.26373790 | undirected | NA | NA |
| ## 896 | AT5G02500 | AT5G27850 | 0.27925253 | undirected | NA | NA |
| ## 897 | AT5G02500 | AT1G43170 | 0.18027142 | undirected | NA | NA |
| ## 898 | AT5G02500 | AT4G22495 | 0.38002375 | undirected | NA | NA |
| ## 899 | AT5G02500 | AT3G09200 | 0.19785457 | undirected | NA | NA |
| ## 900 | AT5G02500 | AT1G14320 | 0.38790687 | undirected | NA | NA |
| ## 901 | AT5G02500 | AT1G13930 | 0.32284476 | undirected | NA | NA |
| ## 902 | AT5G02500 | AT2G36530 | 0.29098319 | undirected | NA | NA |
| ## 903 | AT5G02500 | AT3G49910 | 0.37363720 | undirected | NA | NA |
| ## 904 | AT5G02500 | AT2G34480 | 0.33432614 | undirected | NA | NA |
| ## 905 | AT5G02500 | AT5G02960 | 0.28684668 | undirected | NA | NA |
| ## 906 | AT5G02500 | AT2G18020 | 0.22897262 | undirected | NA | NA |
| ## 907 | AT5G02500 | AT1G13440 | 0.31954471 | undirected | NA | NA |
| ## 908 | AT5G02500 | AT2G16600 | 0.33231942 | undirected | NA | NA |
| ## 909 | AT5G02500 | AT1G07920 | 0.13081416 | undirected | NA | NA |
| ## 910 | AT5G02500 | AT1G04410 | 0.27884198 | undirected | NA | NA |
| ## 911 | AT5G02500 | AT2G36830 | 0.27521323 | undirected | NA | NA |
| ## 912 | AT5G02500 | AT3G15353 | 0.34023671 | undirected | NA | NA |
| ## 913 | AT5G02500 | AT1G62480 | 0.39481259 | undirected | NA | NA |
| ## 914 | AT5G02500 | AT5G38940 | 0.28976436 | undirected | NA | NA |
| ## 915 | AT5G02500 | ATCG01180 | 0.31519148 | undirected | NA | NA |
| ## 916 | AT5G02500 | AT1G07930 | 0.21591397 | undirected | NA | NA |
| ## 917 | AT5G02500 | ATCG00950 | 0.42755273 | undirected | NA | NA |
| ## 918 | AT5G02500 | AT3G13920 | 0.25051482 | undirected | NA | NA |
| ## 919 | AT5G02500 | AT1G28290 | 0.20477430 | undirected | NA | NA |
| ## 920 | AT5G02500 | AT1G04270 | 0.33038425 | undirected | NA | NA |
| ## 921 | AT5G02500 | AT4G35100 | 0.40689298 | undirected | NA | NA |
| ## 922 | AT5G02500 | AT5G48480 | 0.29592436 | undirected | NA | NA |
| ## 923 | AT5G02500 | AT1G52400 | 0.15484212 | undirected | NA | NA |
| ## 924 | AT5G02500 | AT3G02470 | 0.25553076 | undirected | NA | NA |
| ## 925 | AT5G02500 | AT5G15200 | 0.35689889 | undirected | NA | NA |
| ## 926 | AT5G02500 | AT5G48485 | 0.38155076 | undirected | NA | NA |
| ## 927 | AT5G02500 | AT1G20620 | 0.25932796 | undirected | NA | NA |
| ## 928 | AT5G02500 | AT2G27720 | 0.35653501 | undirected | NA | NA |
| ## 929 | AT5G02500 | AT5G02870 | 0.18153395 | undirected | NA | NA |

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|----|-----|-----------|-----------|------------|------------|----|----|
| ## | 930 | AT5G02500 | AT4G15000 | 0.36429347 | undirected | NA | NA |
| ## | 931 | AT5G02500 | AT5G20290 | 0.14311311 | undirected | NA | NA |
| ## | 932 | AT5G02500 | AT4G31700 | 0.09309546 | undirected | NA | NA |
| ## | 933 | AT5G02500 | AT3G04400 | 0.20722421 | undirected | NA | NA |
| ## | 934 | AT5G02500 | AT3G02230 | 0.22386721 | undirected | NA | NA |
| ## | 935 | AT5G02500 | AT1G54410 | 0.39907300 | undirected | NA | NA |
| ## | 936 | AT5G02500 | AT3G24830 | 0.34069215 | undirected | NA | NA |
| ## | 937 | AT5G02500 | AT1G48920 | 0.21520714 | undirected | NA | NA |
| ## | 938 | AT5G02500 | AT3G08770 | 0.35136036 | undirected | NA | NA |
| ## | 939 | AT5G02500 | AT3G05590 | 0.27506918 | undirected | NA | NA |
| ## | 940 | AT5G02500 | AT4G38680 | 0.35839448 | undirected | NA | NA |
| ## | 941 | AT5G02500 | AT3G04840 | 0.41063635 | undirected | NA | NA |
| ## | 942 | AT5G02500 | AT2G28790 | 0.33224979 | undirected | NA | NA |
| ## | 943 | AT5G02500 | AT1G70600 | 0.23340566 | undirected | NA | NA |
| ## | 944 | AT5G02500 | AT4G27090 | 0.35427645 | undirected | NA | NA |
| ## | 945 | AT5G02500 | AT1G77510 | 0.23091062 | undirected | NA | NA |
| ## | 946 | AT5G02500 | AT1G70830 | 0.20611849 | undirected | NA | NA |
| ## | 947 | AT5G02500 | AT1G15690 | 0.13956543 | undirected | NA | NA |
| ## | 948 | AT5G02500 | AT3G52590 | 0.16217672 | undirected | NA | NA |
| ## | 949 | AT5G02500 | AT5G07090 | 0.19067340 | undirected | NA | NA |
| ## | 950 | AT5G02500 | AT5G17920 | 0.23514363 | undirected | NA | NA |
| ## | 951 | AT5G02500 | AT5G56030 | 0.26041718 | undirected | NA | NA |
| ## | 952 | AT5G02500 | AT2G41840 | 0.44354781 | undirected | NA | NA |
| ## | 953 | AT5G02500 | AT3G60245 | 0.26183220 | undirected | NA | NA |
| ## | 954 | AT5G02500 | AT2G08665 | 0.21081664 | undirected | NA | NA |
| ## | 955 | AT5G02500 | AT3G26520 | 0.09583379 | undirected | NA | NA |
| ## | 956 | AT5G02500 | AT2G42840 | 0.39839418 | undirected | NA | NA |
| ## | 957 | AT5G02500 | AT1G72370 | 0.28927498 | undirected | NA | NA |
| ## | 958 | AT5G02500 | AT2G05520 | 0.36559236 | undirected | NA | NA |
| ## | 959 | AT5G02500 | AT4G22513 | 0.32304494 | undirected | NA | NA |
| ## | 960 | AT5G02500 | AT4G22530 | 0.36933881 | undirected | NA | NA |
| ## | 961 | AT5G02500 | ATCG01210 | 0.40223741 | undirected | NA | NA |
| ## | 962 | AT5G02500 | AT3G25520 | 0.26310729 | undirected | NA | NA |
| ## | 963 | AT4G22490 | AT4G21960 | 0.02569249 | undirected | NA | NA |
| ## | 964 | AT4G22490 | AT2G30860 | 0.22540720 | undirected | NA | NA |
| ## | 965 | AT4G22490 | AT3G08580 | 0.29274728 | undirected | NA | NA |
| ## | 966 | AT4G22490 | AT4G22510 | 0.28419914 | undirected | NA | NA |
| ## | 967 | AT4G22490 | AT1G07590 | 0.29155197 | undirected | NA | NA |
| ## | 968 | AT4G22490 | AT3G12145 | 0.25728580 | undirected | NA | NA |
| ## | 969 | AT4G22490 | AT5G54770 | 0.12576814 | undirected | NA | NA |
| ## | 970 | AT4G22490 | AT1G67090 | 0.25057174 | undirected | NA | NA |
| ## | 971 | AT4G22490 | AT1G62500 | 0.28260367 | undirected | NA | NA |
| ## | 972 | AT4G22490 | AT2G38540 | 0.04515559 | undirected | NA | NA |
| ## | 973 | AT4G22490 | AT1G13710 | 0.28782326 | undirected | NA | NA |
| ## | 974 | AT4G22490 | AT4G03210 | 0.14969794 | undirected | NA | NA |
| ## | 975 | AT4G22490 | AT3G22121 | 0.29761364 | undirected | NA | NA |
| ## | 976 | AT4G22490 | AT5G09220 | 0.10402730 | undirected | NA | NA |
| ## | 977 | AT4G22490 | AT4G22517 | 0.05189142 | undirected | NA | NA |
| ## | 978 | AT4G22490 | AT3G16640 | 0.24310578 | undirected | NA | NA |
| ## | 979 | AT4G22490 | AT4G34870 | 0.17609668 | undirected | NA | NA |

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|---------|-----------|-----------|------------|------------|----|----|
| ## 980 | AT4G22490 | AT4G29030 | 0.03962714 | undirected | NA | NA |
| ## 981 | AT4G22490 | AT2G02100 | 0.30189495 | undirected | NA | NA |
| ## 982 | AT4G22490 | AT3G05727 | 0.30582529 | undirected | NA | NA |
| ## 983 | AT4G22490 | AT5G27850 | 0.31168596 | undirected | NA | NA |
| ## 984 | AT4G22490 | AT1G43170 | 0.03458369 | undirected | NA | NA |
| ## 985 | AT4G22490 | AT4G22495 | 0.22187762 | undirected | NA | NA |
| ## 986 | AT4G22490 | AT3G09200 | 0.16589314 | undirected | NA | NA |
| ## 987 | AT4G22490 | AT1G14320 | 0.17308553 | undirected | NA | NA |
| ## 988 | AT4G22490 | AT1G13930 | 0.24960784 | undirected | NA | NA |
| ## 989 | AT4G22490 | AT2G36530 | 0.04059544 | undirected | NA | NA |
| ## 990 | AT4G22490 | AT3G49910 | 0.18289369 | undirected | NA | NA |
| ## 991 | AT4G22490 | AT2G34480 | 0.28289261 | undirected | NA | NA |
| ## 992 | AT4G22490 | AT5G02960 | 0.21744637 | undirected | NA | NA |
| ## 993 | AT4G22490 | AT2G18020 | 0.24514614 | undirected | NA | NA |
| ## 994 | AT4G22490 | AT1G13440 | 0.30746866 | undirected | NA | NA |
| ## 995 | AT4G22490 | AT2G16600 | 0.26686358 | undirected | NA | NA |
| ## 996 | AT4G22490 | AT1G07920 | 0.15801147 | undirected | NA | NA |
| ## 997 | AT4G22490 | AT1G04410 | 0.10266433 | undirected | NA | NA |
| ## 998 | AT4G22490 | AT2G36830 | 0.23772240 | undirected | NA | NA |
| ## 999 | AT4G22490 | AT3G15353 | 0.06099891 | undirected | NA | NA |
| ## 1000 | AT4G22490 | AT1G62480 | 0.20945227 | undirected | NA | NA |
| ## 1001 | AT4G22490 | AT5G38940 | 0.29813039 | undirected | NA | NA |
| ## 1002 | AT4G22490 | ATCG01180 | 0.25304773 | undirected | NA | NA |
| ## 1003 | AT4G22490 | AT1G07930 | 0.18184105 | undirected | NA | NA |
| ## 1004 | AT4G22490 | ATCG00950 | 0.28487734 | undirected | NA | NA |
| ## 1005 | AT4G22490 | AT3G13920 | 0.18391123 | undirected | NA | NA |
| ## 1006 | AT4G22490 | AT1G28290 | 0.11480652 | undirected | NA | NA |
| ## 1007 | AT4G22490 | AT1G04270 | 0.27444705 | undirected | NA | NA |
| ## 1008 | AT4G22490 | AT4G35100 | 0.34728466 | undirected | NA | NA |
| ## 1009 | AT4G22490 | AT5G48480 | 0.23718587 | undirected | NA | NA |
| ## 1010 | AT4G22490 | AT1G52400 | 0.08979857 | undirected | NA | NA |
| ## 1011 | AT4G22490 | AT3G02470 | 0.03235031 | undirected | NA | NA |
| ## 1012 | AT4G22490 | AT5G15200 | 0.34072486 | undirected | NA | NA |
| ## 1013 | AT4G22490 | AT5G48485 | 0.24260644 | undirected | NA | NA |
| ## 1014 | AT4G22490 | AT1G20620 | 0.21051465 | undirected | NA | NA |
| ## 1015 | AT4G22490 | AT2G27720 | 0.19999307 | undirected | NA | NA |
| ## 1016 | AT4G22490 | AT5G02870 | 0.14241663 | undirected | NA | NA |
| ## 1017 | AT4G22490 | AT4G15000 | 0.33845963 | undirected | NA | NA |
| ## 1018 | AT4G22490 | AT5G20290 | 0.06941677 | undirected | NA | NA |
| ## 1019 | AT4G22490 | AT4G31700 | 0.08494851 | undirected | NA | NA |
| ## 1020 | AT4G22490 | AT3G04400 | 0.03126196 | undirected | NA | NA |
| ## 1021 | AT4G22490 | AT3G02230 | 0.23126875 | undirected | NA | NA |
| ## 1022 | AT4G22490 | AT1G54410 | 0.33283939 | undirected | NA | NA |
| ## 1023 | AT4G22490 | AT3G24830 | 0.30384615 | undirected | NA | NA |
| ## 1024 | AT4G22490 | AT1G48920 | 0.02983428 | undirected | NA | NA |
| ## 1025 | AT4G22490 | AT3G08770 | 0.19173192 | undirected | NA | NA |
| ## 1026 | AT4G22490 | AT3G05590 | 0.29915562 | undirected | NA | NA |
| ## 1027 | AT4G22490 | AT4G38680 | 0.27146605 | undirected | NA | NA |
| ## 1028 | AT4G22490 | AT3G04840 | 0.12817044 | undirected | NA | NA |
| ## 1029 | AT4G22490 | AT2G28790 | 0.04920843 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1030 | AT4G22490 | AT1G70600 | 0.19913789 | undirected | NA | NA |
| ## | 1031 | AT4G22490 | AT4G27090 | 0.28810958 | undirected | NA | NA |
| ## | 1032 | AT4G22490 | AT1G77510 | 0.21695215 | undirected | NA | NA |
| ## | 1033 | AT4G22490 | AT1G70830 | 0.02713156 | undirected | NA | NA |
| ## | 1034 | AT4G22490 | AT1G15690 | 0.07460402 | undirected | NA | NA |
| ## | 1035 | AT4G22490 | AT5G07090 | 0.17468413 | undirected | NA | NA |
| ## | 1036 | AT4G22490 | AT5G17920 | 0.02805327 | undirected | NA | NA |
| ## | 1037 | AT4G22490 | AT5G56030 | 0.29756163 | undirected | NA | NA |
| ## | 1038 | AT4G22490 | AT2G41840 | 0.28496574 | undirected | NA | NA |
| ## | 1039 | AT4G22490 | AT3G60245 | 0.20111065 | undirected | NA | NA |
| ## | 1040 | AT4G22490 | AT2G08665 | 0.06314126 | undirected | NA | NA |
| ## | 1041 | AT4G22490 | AT2G42840 | 0.19860025 | undirected | NA | NA |
| ## | 1042 | AT4G22490 | AT1G72370 | 0.04900307 | undirected | NA | NA |
| ## | 1043 | AT4G22490 | AT2G05520 | 0.33162249 | undirected | NA | NA |
| ## | 1044 | AT4G22490 | AT4G22513 | 0.31069760 | undirected | NA | NA |
| ## | 1045 | AT4G22490 | AT4G22530 | 0.26290934 | undirected | NA | NA |
| ## | 1046 | AT4G22490 | ATCG01210 | 0.24173924 | undirected | NA | NA |
| ## | 1047 | AT4G22490 | AT3G25520 | 0.09762670 | undirected | NA | NA |
| ## | 1048 | AT4G21960 | AT2G30860 | 0.19360824 | undirected | NA | NA |
| ## | 1049 | AT4G21960 | AT3G08580 | 0.03591661 | undirected | NA | NA |
| ## | 1050 | AT4G21960 | AT1G78370 | 0.06937034 | undirected | NA | NA |
| ## | 1051 | AT4G21960 | AT4G22510 | 0.06539161 | undirected | NA | NA |
| ## | 1052 | AT4G21960 | AT1G07590 | 0.12800835 | undirected | NA | NA |
| ## | 1053 | AT4G21960 | AT3G12145 | 0.09857089 | undirected | NA | NA |
| ## | 1054 | AT4G21960 | AT1G67090 | 0.03839471 | undirected | NA | NA |
| ## | 1055 | AT4G21960 | AT1G62500 | 0.20506557 | undirected | NA | NA |
| ## | 1056 | AT4G21960 | AT2G38540 | 0.22375978 | undirected | NA | NA |
| ## | 1057 | AT4G21960 | AT1G13710 | 0.06898858 | undirected | NA | NA |
| ## | 1058 | AT4G21960 | AT3G22121 | 0.10193114 | undirected | NA | NA |
| ## | 1059 | AT4G21960 | AT5G09220 | 0.16758212 | undirected | NA | NA |
| ## | 1060 | AT4G21960 | AT4G22517 | 0.27312026 | undirected | NA | NA |
| ## | 1061 | AT4G21960 | AT3G16640 | 0.06317926 | undirected | NA | NA |
| ## | 1062 | AT4G21960 | AT4G34870 | 0.21713692 | undirected | NA | NA |
| ## | 1063 | AT4G21960 | AT4G29030 | 0.20828550 | undirected | NA | NA |
| ## | 1064 | AT4G21960 | AT2G02100 | 0.16969985 | undirected | NA | NA |
| ## | 1065 | AT4G21960 | AT3G05727 | 0.04648988 | undirected | NA | NA |
| ## | 1066 | AT4G21960 | AT5G27850 | 0.06235722 | undirected | NA | NA |
| ## | 1067 | AT4G21960 | AT4G22495 | 0.23512255 | undirected | NA | NA |
| ## | 1068 | AT4G21960 | AT3G09200 | 0.04407583 | undirected | NA | NA |
| ## | 1069 | AT4G21960 | AT1G14320 | 0.26179314 | undirected | NA | NA |
| ## | 1070 | AT4G21960 | AT1G13930 | 0.11664000 | undirected | NA | NA |
| ## | 1071 | AT4G21960 | AT2G36530 | 0.22393248 | undirected | NA | NA |
| ## | 1072 | AT4G21960 | AT3G49910 | 0.22964522 | undirected | NA | NA |
| ## | 1073 | AT4G21960 | AT2G34480 | 0.14028400 | undirected | NA | NA |
| ## | 1074 | AT4G21960 | AT5G02960 | 0.05364030 | undirected | NA | NA |
| ## | 1075 | AT4G21960 | AT2G18020 | 0.08348621 | undirected | NA | NA |
| ## | 1076 | AT4G21960 | AT1G13440 | 0.08475380 | undirected | NA | NA |
| ## | 1077 | AT4G21960 | AT2G16600 | 0.08473966 | undirected | NA | NA |
| ## | 1078 | AT4G21960 | AT1G04410 | 0.21119579 | undirected | NA | NA |
| ## | 1079 | AT4G21960 | AT2G36830 | 0.06880351 | undirected | NA | NA |

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|---------|-----------|-----------|------------|------------|----|----|
| ## 1080 | AT4G21960 | AT3G15353 | 0.25859158 | undirected | NA | NA |
| ## 1081 | AT4G21960 | AT1G62480 | 0.25213263 | undirected | NA | NA |
| ## 1082 | AT4G21960 | AT5G38940 | 0.04492471 | undirected | NA | NA |
| ## 1083 | AT4G21960 | ATCG01180 | 0.16636185 | undirected | NA | NA |
| ## 1084 | AT4G21960 | AT1G07930 | 0.07060862 | undirected | NA | NA |
| ## 1085 | AT4G21960 | ATCG00950 | 0.15819620 | undirected | NA | NA |
| ## 1086 | AT4G21960 | AT3G13920 | 0.02875080 | undirected | NA | NA |
| ## 1087 | AT4G21960 | AT1G28290 | 0.02729480 | undirected | NA | NA |
| ## 1088 | AT4G21960 | AT1G04270 | 0.11823671 | undirected | NA | NA |
| ## 1089 | AT4G21960 | AT4G35100 | 0.12190976 | undirected | NA | NA |
| ## 1090 | AT4G21960 | AT5G48480 | 0.09774998 | undirected | NA | NA |
| ## 1091 | AT4G21960 | AT3G02470 | 0.16991871 | undirected | NA | NA |
| ## 1092 | AT4G21960 | AT5G15200 | 0.06226847 | undirected | NA | NA |
| ## 1093 | AT4G21960 | AT5G48485 | 0.21700151 | undirected | NA | NA |
| ## 1094 | AT4G21960 | AT1G20620 | 0.07307999 | undirected | NA | NA |
| ## 1095 | AT4G21960 | AT2G27720 | 0.11915382 | undirected | NA | NA |
| ## 1096 | AT4G21960 | AT4G15000 | 0.09007257 | undirected | NA | NA |
| ## 1097 | AT4G21960 | AT5G20290 | 0.11146211 | undirected | NA | NA |
| ## 1098 | AT4G21960 | AT3G04400 | 0.13180722 | undirected | NA | NA |
| ## 1099 | AT4G21960 | AT3G02230 | 0.05128729 | undirected | NA | NA |
| ## 1100 | AT4G21960 | AT1G54410 | 0.12073340 | undirected | NA | NA |
| ## 1101 | AT4G21960 | AT3G24830 | 0.06871226 | undirected | NA | NA |
| ## 1102 | AT4G21960 | AT1G48920 | 0.16367053 | undirected | NA | NA |
| ## 1103 | AT4G21960 | AT3G08770 | 0.15292113 | undirected | NA | NA |
| ## 1104 | AT4G21960 | AT3G05590 | 0.02944674 | undirected | NA | NA |
| ## 1105 | AT4G21960 | AT4G38680 | 0.18753582 | undirected | NA | NA |
| ## 1106 | AT4G21960 | AT3G04840 | 0.20572308 | undirected | NA | NA |
| ## 1107 | AT4G21960 | AT2G28790 | 0.22486142 | undirected | NA | NA |
| ## 1108 | AT4G21960 | AT1G70600 | 0.04150899 | undirected | NA | NA |
| ## 1109 | AT4G21960 | AT4G27090 | 0.18582409 | undirected | NA | NA |
| ## 1110 | AT4G21960 | AT1G77510 | 0.06644723 | undirected | NA | NA |
| ## 1111 | AT4G21960 | AT1G70830 | 0.08917384 | undirected | NA | NA |
| ## 1112 | AT4G21960 | AT3G52590 | 0.03788236 | undirected | NA | NA |
| ## 1113 | AT4G21960 | AT5G17920 | 0.16274831 | undirected | NA | NA |
| ## 1114 | AT4G21960 | AT5G56030 | 0.07085989 | undirected | NA | NA |
| ## 1115 | AT4G21960 | AT2G41840 | 0.16733711 | undirected | NA | NA |
| ## 1116 | AT4G21960 | AT3G60245 | 0.07591565 | undirected | NA | NA |
| ## 1117 | AT4G21960 | AT3G26520 | 0.12033665 | undirected | NA | NA |
| ## 1118 | AT4G21960 | AT2G42840 | 0.26769934 | undirected | NA | NA |
| ## 1119 | AT4G21960 | AT1G72370 | 0.17592101 | undirected | NA | NA |
| ## 1120 | AT4G21960 | AT2G05520 | 0.11257938 | undirected | NA | NA |
| ## 1121 | AT4G21960 | AT4G22513 | 0.07941220 | undirected | NA | NA |
| ## 1122 | AT4G21960 | AT4G22530 | 0.13438070 | undirected | NA | NA |
| ## 1123 | AT4G21960 | ATCG01210 | 0.19559432 | undirected | NA | NA |
| ## 1124 | AT4G21960 | AT3G25520 | 0.03112901 | undirected | NA | NA |
| ## 1125 | AT2G30860 | AT3G08580 | 0.30447477 | undirected | NA | NA |
| ## 1126 | AT2G30860 | AT1G78370 | 0.08475712 | undirected | NA | NA |
| ## 1127 | AT2G30860 | AT4G22510 | 0.25261332 | undirected | NA | NA |
| ## 1128 | AT2G30860 | AT1G07590 | 0.39910098 | undirected | NA | NA |
| ## 1129 | AT2G30860 | AT3G12145 | 0.29704976 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1130 | AT2G30860 | AT5G54770 | 0.16224457 | undirected | NA | NA |
| ## | 1131 | AT2G30860 | AT1G67090 | 0.25143265 | undirected | NA | NA |
| ## | 1132 | AT2G30860 | AT1G62500 | 0.40145058 | undirected | NA | NA |
| ## | 1133 | AT2G30860 | AT2G38540 | 0.27796196 | undirected | NA | NA |
| ## | 1134 | AT2G30860 | AT1G13710 | 0.36223053 | undirected | NA | NA |
| ## | 1135 | AT2G30860 | AT4G03210 | 0.14995105 | undirected | NA | NA |
| ## | 1136 | AT2G30860 | AT3G22121 | 0.36742996 | undirected | NA | NA |
| ## | 1137 | AT2G30860 | AT5G09220 | 0.30421384 | undirected | NA | NA |
| ## | 1138 | AT2G30860 | AT4G22517 | 0.30893547 | undirected | NA | NA |
| ## | 1139 | AT2G30860 | AT3G16640 | 0.30411073 | undirected | NA | NA |
| ## | 1140 | AT2G30860 | AT4G34870 | 0.29731848 | undirected | NA | NA |
| ## | 1141 | AT2G30860 | AT4G29030 | 0.21576124 | undirected | NA | NA |
| ## | 1142 | AT2G30860 | AT2G02100 | 0.42497880 | undirected | NA | NA |
| ## | 1143 | AT2G30860 | AT3G05727 | 0.29730347 | undirected | NA | NA |
| ## | 1144 | AT2G30860 | AT5G27850 | 0.30105252 | undirected | NA | NA |
| ## | 1145 | AT2G30860 | AT1G43170 | 0.14717269 | undirected | NA | NA |
| ## | 1146 | AT2G30860 | AT4G22495 | 0.31724806 | undirected | NA | NA |
| ## | 1147 | AT2G30860 | AT3G09200 | 0.18833294 | undirected | NA | NA |
| ## | 1148 | AT2G30860 | AT1G14320 | 0.31365409 | undirected | NA | NA |
| ## | 1149 | AT2G30860 | AT1G13930 | 0.31429190 | undirected | NA | NA |
| ## | 1150 | AT2G30860 | AT2G36530 | 0.29435339 | undirected | NA | NA |
| ## | 1151 | AT2G30860 | AT3G49910 | 0.29399341 | undirected | NA | NA |
| ## | 1152 | AT2G30860 | AT2G34480 | 0.35433307 | undirected | NA | NA |
| ## | 1153 | AT2G30860 | AT5G02960 | 0.27800245 | undirected | NA | NA |
| ## | 1154 | AT2G30860 | AT2G18020 | 0.24961886 | undirected | NA | NA |
| ## | 1155 | AT2G30860 | AT1G13440 | 0.34339131 | undirected | NA | NA |
| ## | 1156 | AT2G30860 | AT2G16600 | 0.31741443 | undirected | NA | NA |
| ## | 1157 | AT2G30860 | AT1G07920 | 0.14802251 | undirected | NA | NA |
| ## | 1158 | AT2G30860 | AT1G04410 | 0.29227252 | undirected | NA | NA |
| ## | 1159 | AT2G30860 | AT2G36830 | 0.28277787 | undirected | NA | NA |
| ## | 1160 | AT2G30860 | AT3G15353 | 0.33112510 | undirected | NA | NA |
| ## | 1161 | AT2G30860 | AT1G62480 | 0.32384169 | undirected | NA | NA |
| ## | 1162 | AT2G30860 | AT5G38940 | 0.30239315 | undirected | NA | NA |
| ## | 1163 | AT2G30860 | ATCG01180 | 0.30969323 | undirected | NA | NA |
| ## | 1164 | AT2G30860 | AT1G07930 | 0.21398107 | undirected | NA | NA |
| ## | 1165 | AT2G30860 | ATCG00950 | 0.40181591 | undirected | NA | NA |
| ## | 1166 | AT2G30860 | AT3G13920 | 0.23576933 | undirected | NA | NA |
| ## | 1167 | AT2G30860 | AT1G28290 | 0.15818983 | undirected | NA | NA |
| ## | 1168 | AT2G30860 | AT1G04270 | 0.34500939 | undirected | NA | NA |
| ## | 1169 | AT2G30860 | AT4G35100 | 0.40873980 | undirected | NA | NA |
| ## | 1170 | AT2G30860 | AT5G48480 | 0.30351473 | undirected | NA | NA |
| ## | 1171 | AT2G30860 | AT1G52400 | 0.12012339 | undirected | NA | NA |
| ## | 1172 | AT2G30860 | AT3G02470 | 0.21311928 | undirected | NA | NA |
| ## | 1173 | AT2G30860 | AT5G15200 | 0.36554771 | undirected | NA | NA |
| ## | 1174 | AT2G30860 | AT5G48485 | 0.34995938 | undirected | NA | NA |
| ## | 1175 | AT2G30860 | AT1G20620 | 0.25984807 | undirected | NA | NA |
| ## | 1176 | AT2G30860 | AT2G27720 | 0.30661339 | undirected | NA | NA |
| ## | 1177 | AT2G30860 | AT5G02870 | 0.17392234 | undirected | NA | NA |
| ## | 1178 | AT2G30860 | AT4G15000 | 0.37947462 | undirected | NA | NA |
| ## | 1179 | AT2G30860 | AT5G20290 | 0.17324789 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1180 | AT2G30860 | AT4G31700 | 0.09363993 | undirected | NA | NA |
| ## | 1181 | AT2G30860 | AT3G04400 | 0.21176715 | undirected | NA | NA |
| ## | 1182 | AT2G30860 | AT3G02230 | 0.23245931 | undirected | NA | NA |
| ## | 1183 | AT2G30860 | AT1G54410 | 0.40348280 | undirected | NA | NA |
| ## | 1184 | AT2G30860 | AT3G24830 | 0.33784513 | undirected | NA | NA |
| ## | 1185 | AT2G30860 | AT1G48920 | 0.23271526 | undirected | NA | NA |
| ## | 1186 | AT2G30860 | AT3G08770 | 0.29461607 | undirected | NA | NA |
| ## | 1187 | AT2G30860 | AT3G05590 | 0.28856921 | undirected | NA | NA |
| ## | 1188 | AT2G30860 | AT4G38680 | 0.35994129 | undirected | NA | NA |
| ## | 1189 | AT2G30860 | AT3G04840 | 0.31287570 | undirected | NA | NA |
| ## | 1190 | AT2G30860 | AT2G28790 | 0.29671475 | undirected | NA | NA |
| ## | 1191 | AT2G30860 | AT1G70600 | 0.23434777 | undirected | NA | NA |
| ## | 1192 | AT2G30860 | AT4G27090 | 0.36975229 | undirected | NA | NA |
| ## | 1193 | AT2G30860 | AT1G77510 | 0.23147057 | undirected | NA | NA |
| ## | 1194 | AT2G30860 | AT1G70830 | 0.15260973 | undirected | NA | NA |
| ## | 1195 | AT2G30860 | AT1G15690 | 0.11119704 | undirected | NA | NA |
| ## | 1196 | AT2G30860 | AT3G52590 | 0.10004661 | undirected | NA | NA |
| ## | 1197 | AT2G30860 | AT5G07090 | 0.18843758 | undirected | NA | NA |
| ## | 1198 | AT2G30860 | AT5G17920 | 0.18395003 | undirected | NA | NA |
| ## | 1199 | AT2G30860 | AT5G56030 | 0.28436713 | undirected | NA | NA |
| ## | 1200 | AT2G30860 | AT2G41840 | 0.40318111 | undirected | NA | NA |
| ## | 1201 | AT2G30860 | AT3G60245 | 0.23351838 | undirected | NA | NA |
| ## | 1202 | AT2G30860 | AT2G08665 | 0.17889052 | undirected | NA | NA |
| ## | 1203 | AT2G30860 | AT3G26520 | 0.07953449 | undirected | NA | NA |
| ## | 1204 | AT2G30860 | AT2G42840 | 0.32836548 | undirected | NA | NA |
| ## | 1205 | AT2G30860 | AT1G72370 | 0.29908705 | undirected | NA | NA |
| ## | 1206 | AT2G30860 | AT2G05520 | 0.37807146 | undirected | NA | NA |
| ## | 1207 | AT2G30860 | AT4G22513 | 0.32590809 | undirected | NA | NA |
| ## | 1208 | AT2G30860 | AT4G22530 | 0.35801317 | undirected | NA | NA |
| ## | 1209 | AT2G30860 | ATCG01210 | 0.36507636 | undirected | NA | NA |
| ## | 1210 | AT2G30860 | AT3G25520 | 0.21018341 | undirected | NA | NA |
| ## | 1211 | AT3G08580 | AT1G78370 | 0.02460681 | undirected | NA | NA |
| ## | 1212 | AT3G08580 | AT4G22510 | 0.34667143 | undirected | NA | NA |
| ## | 1213 | AT3G08580 | AT1G07590 | 0.34045063 | undirected | NA | NA |
| ## | 1214 | AT3G08580 | AT3G12145 | 0.36322397 | undirected | NA | NA |
| ## | 1215 | AT3G08580 | AT5G54770 | 0.36094533 | undirected | NA | NA |
| ## | 1216 | AT3G08580 | AT1G67090 | 0.37706077 | undirected | NA | NA |
| ## | 1217 | AT3G08580 | AT1G62500 | 0.30704180 | undirected | NA | NA |
| ## | 1218 | AT3G08580 | AT2G38540 | 0.09181124 | undirected | NA | NA |
| ## | 1219 | AT3G08580 | AT1G13710 | 0.37406070 | undirected | NA | NA |
| ## | 1220 | AT3G08580 | AT4G03210 | 0.35377601 | undirected | NA | NA |
| ## | 1221 | AT3G08580 | AT3G22121 | 0.36278342 | undirected | NA | NA |
| ## | 1222 | AT3G08580 | AT5G09220 | 0.24336101 | undirected | NA | NA |
| ## | 1223 | AT3G08580 | AT4G22517 | 0.10849095 | undirected | NA | NA |
| ## | 1224 | AT3G08580 | AT3G16640 | 0.36610189 | undirected | NA | NA |
| ## | 1225 | AT3G08580 | AT4G34870 | 0.24586077 | undirected | NA | NA |
| ## | 1226 | AT3G08580 | AT4G29030 | 0.06442791 | undirected | NA | NA |
| ## | 1227 | AT3G08580 | AT2G02100 | 0.33329279 | undirected | NA | NA |
| ## | 1228 | AT3G08580 | AT3G05727 | 0.36118805 | undirected | NA | NA |
| ## | 1229 | AT3G08580 | AT5G27850 | 0.36571000 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1230 | AT3G08580 | AT1G43170 | 0.28019101 | undirected | NA | NA |
| ## | 1231 | AT3G08580 | AT4G22495 | 0.27323176 | undirected | NA | NA |
| ## | 1232 | AT3G08580 | AT3G09200 | 0.35491761 | undirected | NA | NA |
| ## | 1233 | AT3G08580 | AT1G14320 | 0.24359753 | undirected | NA | NA |
| ## | 1234 | AT3G08580 | AT1G13930 | 0.32189912 | undirected | NA | NA |
| ## | 1235 | AT3G08580 | AT2G36530 | 0.08957780 | undirected | NA | NA |
| ## | 1236 | AT3G08580 | AT3G49910 | 0.23883668 | undirected | NA | NA |
| ## | 1237 | AT3G08580 | AT2G34480 | 0.34777549 | undirected | NA | NA |
| ## | 1238 | AT3G08580 | AT5G02960 | 0.35454663 | undirected | NA | NA |
| ## | 1239 | AT3G08580 | AT2G18020 | 0.33517011 | undirected | NA | NA |
| ## | 1240 | AT3G08580 | AT1G13440 | 0.36941077 | undirected | NA | NA |
| ## | 1241 | AT3G08580 | AT2G16600 | 0.36258581 | undirected | NA | NA |
| ## | 1242 | AT3G08580 | AT1G07920 | 0.34902444 | undirected | NA | NA |
| ## | 1243 | AT3G08580 | AT1G04410 | 0.18252713 | undirected | NA | NA |
| ## | 1244 | AT3G08580 | AT2G36830 | 0.33958354 | undirected | NA | NA |
| ## | 1245 | AT3G08580 | AT3G15353 | 0.13062276 | undirected | NA | NA |
| ## | 1246 | AT3G08580 | AT1G62480 | 0.26449236 | undirected | NA | NA |
| ## | 1247 | AT3G08580 | AT5G38940 | 0.37520017 | undirected | NA | NA |
| ## | 1248 | AT3G08580 | ATCG01180 | 0.31029566 | undirected | NA | NA |
| ## | 1249 | AT3G08580 | AT1G07930 | 0.28018120 | undirected | NA | NA |
| ## | 1250 | AT3G08580 | ATCG00950 | 0.33364271 | undirected | NA | NA |
| ## | 1251 | AT3G08580 | AT3G13920 | 0.37950016 | undirected | NA | NA |
| ## | 1252 | AT3G08580 | AT1G28290 | 0.37917616 | undirected | NA | NA |
| ## | 1253 | AT3G08580 | AT1G04270 | 0.35305861 | undirected | NA | NA |
| ## | 1254 | AT3G08580 | AT4G35100 | 0.36190728 | undirected | NA | NA |
| ## | 1255 | AT3G08580 | AT5G48480 | 0.35516629 | undirected | NA | NA |
| ## | 1256 | AT3G08580 | AT1G52400 | 0.34941662 | undirected | NA | NA |
| ## | 1257 | AT3G08580 | AT3G02470 | 0.11213190 | undirected | NA | NA |
| ## | 1258 | AT3G08580 | AT5G15200 | 0.38059217 | undirected | NA | NA |
| ## | 1259 | AT3G08580 | AT5G48485 | 0.28249802 | undirected | NA | NA |
| ## | 1260 | AT3G08580 | AT1G20620 | 0.34889859 | undirected | NA | NA |
| ## | 1261 | AT3G08580 | AT2G27720 | 0.31652555 | undirected | NA | NA |
| ## | 1262 | AT3G08580 | AT5G02870 | 0.38449264 | undirected | NA | NA |
| ## | 1263 | AT3G08580 | AT4G15000 | 0.37389369 | undirected | NA | NA |
| ## | 1264 | AT3G08580 | AT5G20290 | 0.14080016 | undirected | NA | NA |
| ## | 1265 | AT3G08580 | AT4G31700 | 0.30601522 | undirected | NA | NA |
| ## | 1266 | AT3G08580 | AT3G04400 | 0.06136937 | undirected | NA | NA |
| ## | 1267 | AT3G08580 | AT3G02230 | 0.36452326 | undirected | NA | NA |
| ## | 1268 | AT3G08580 | AT1G54410 | 0.35622341 | undirected | NA | NA |
| ## | 1269 | AT3G08580 | AT3G24830 | 0.38161351 | undirected | NA | NA |
| ## | 1270 | AT3G08580 | AT1G48920 | 0.06293410 | undirected | NA | NA |
| ## | 1271 | AT3G08580 | AT3G08770 | 0.32728112 | undirected | NA | NA |
| ## | 1272 | AT3G08580 | AT3G05590 | 0.37812356 | undirected | NA | NA |
| ## | 1273 | AT3G08580 | AT4G38680 | 0.32157270 | undirected | NA | NA |
| ## | 1274 | AT3G08580 | AT3G04840 | 0.20976197 | undirected | NA | NA |
| ## | 1275 | AT3G08580 | AT2G28790 | 0.11627107 | undirected | NA | NA |
| ## | 1276 | AT3G08580 | AT1G70600 | 0.36781110 | undirected | NA | NA |
| ## | 1277 | AT3G08580 | AT4G27090 | 0.33338030 | undirected | NA | NA |
| ## | 1278 | AT3G08580 | AT1G77510 | 0.32731605 | undirected | NA | NA |
| ## | 1279 | AT3G08580 | AT1G70830 | 0.12331667 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1280 | AT3G08580 | AT1G15690 | 0.37609631 | undirected | NA | NA |
| ## | 1281 | AT3G08580 | AT3G52590 | 0.16466576 | undirected | NA | NA |
| ## | 1282 | AT3G08580 | AT5G07090 | 0.37457445 | undirected | NA | NA |
| ## | 1283 | AT3G08580 | AT5G17920 | 0.08670588 | undirected | NA | NA |
| ## | 1284 | AT3G08580 | AT5G56030 | 0.34582978 | undirected | NA | NA |
| ## | 1285 | AT3G08580 | AT2G41840 | 0.32563823 | undirected | NA | NA |
| ## | 1286 | AT3G08580 | AT3G60245 | 0.31230092 | undirected | NA | NA |
| ## | 1287 | AT3G08580 | AT2G08665 | 0.35426443 | undirected | NA | NA |
| ## | 1288 | AT3G08580 | AT2G42840 | 0.26012961 | undirected | NA | NA |
| ## | 1289 | AT3G08580 | AT1G72370 | 0.12788507 | undirected | NA | NA |
| ## | 1290 | AT3G08580 | AT2G05520 | 0.36026445 | undirected | NA | NA |
| ## | 1291 | AT3G08580 | AT4G22513 | 0.37117665 | undirected | NA | NA |
| ## | 1292 | AT3G08580 | AT4G22530 | 0.34705754 | undirected | NA | NA |
| ## | 1293 | AT3G08580 | ATCG01210 | 0.29755269 | undirected | NA | NA |
| ## | 1294 | AT3G08580 | AT3G25520 | 0.31924597 | undirected | NA | NA |
| ## | 1295 | AT1G78370 | AT4G22510 | 0.05303768 | undirected | NA | NA |
| ## | 1296 | AT1G78370 | AT1G07590 | 0.02999778 | undirected | NA | NA |
| ## | 1297 | AT1G78370 | AT3G12145 | 0.03836562 | undirected | NA | NA |
| ## | 1298 | AT1G78370 | AT1G67090 | 0.05301532 | undirected | NA | NA |
| ## | 1299 | AT1G78370 | AT1G62500 | 0.05689483 | undirected | NA | NA |
| ## | 1300 | AT1G78370 | AT2G38540 | 0.14486503 | undirected | NA | NA |
| ## | 1301 | AT1G78370 | AT1G13710 | 0.02723561 | undirected | NA | NA |
| ## | 1302 | AT1G78370 | AT4G03210 | 0.03080090 | undirected | NA | NA |
| ## | 1303 | AT1G78370 | AT3G22121 | 0.03220426 | undirected | NA | NA |
| ## | 1304 | AT1G78370 | AT5G09220 | 0.04344612 | undirected | NA | NA |
| ## | 1305 | AT1G78370 | AT4G22517 | 0.08749123 | undirected | NA | NA |
| ## | 1306 | AT1G78370 | AT3G16640 | 0.04132451 | undirected | NA | NA |
| ## | 1307 | AT1G78370 | AT4G34870 | 0.09929071 | undirected | NA | NA |
| ## | 1308 | AT1G78370 | AT4G29030 | 0.19323822 | undirected | NA | NA |
| ## | 1309 | AT1G78370 | AT2G02100 | 0.04338767 | undirected | NA | NA |
| ## | 1310 | AT1G78370 | AT3G05727 | 0.07388709 | undirected | NA | NA |
| ## | 1311 | AT1G78370 | AT5G27850 | 0.04945286 | undirected | NA | NA |
| ## | 1312 | AT1G78370 | AT4G22495 | 0.08456161 | undirected | NA | NA |
| ## | 1313 | AT1G78370 | AT3G09200 | 0.03993579 | undirected | NA | NA |
| ## | 1314 | AT1G78370 | AT1G14320 | 0.06366022 | undirected | NA | NA |
| ## | 1315 | AT1G78370 | AT1G13930 | 0.04439537 | undirected | NA | NA |
| ## | 1316 | AT1G78370 | AT2G36530 | 0.11168221 | undirected | NA | NA |
| ## | 1317 | AT1G78370 | AT3G49910 | 0.03907430 | undirected | NA | NA |
| ## | 1318 | AT1G78370 | AT2G34480 | 0.08626064 | undirected | NA | NA |
| ## | 1319 | AT1G78370 | AT5G02960 | 0.03342813 | undirected | NA | NA |
| ## | 1320 | AT1G78370 | AT2G18020 | 0.05528487 | undirected | NA | NA |
| ## | 1321 | AT1G78370 | AT1G13440 | 0.07665582 | undirected | NA | NA |
| ## | 1322 | AT1G78370 | AT2G16600 | 0.02739868 | undirected | NA | NA |
| ## | 1323 | AT1G78370 | AT1G07920 | 0.04121423 | undirected | NA | NA |
| ## | 1324 | AT1G78370 | AT1G04410 | 0.16793235 | undirected | NA | NA |
| ## | 1325 | AT1G78370 | AT2G36830 | 0.05476240 | undirected | NA | NA |
| ## | 1326 | AT1G78370 | AT3G15353 | 0.12516687 | undirected | NA | NA |
| ## | 1327 | AT1G78370 | AT1G62480 | 0.08081723 | undirected | NA | NA |
| ## | 1328 | AT1G78370 | AT5G38940 | 0.04739005 | undirected | NA | NA |
| ## | 1329 | AT1G78370 | ATCG01180 | 0.09661117 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1330 | AT1G78370 | AT1G07930 | 0.11400656 | undirected | NA | NA |
| ## | 1331 | AT1G78370 | ATCG00950 | 0.05048377 | undirected | NA | NA |
| ## | 1332 | AT1G78370 | AT1G04270 | 0.06436531 | undirected | NA | NA |
| ## | 1333 | AT1G78370 | AT4G35100 | 0.05779854 | undirected | NA | NA |
| ## | 1334 | AT1G78370 | AT5G48480 | 0.05081444 | undirected | NA | NA |
| ## | 1335 | AT1G78370 | AT3G02470 | 0.02877953 | undirected | NA | NA |
| ## | 1336 | AT1G78370 | AT5G15200 | 0.04926122 | undirected | NA | NA |
| ## | 1337 | AT1G78370 | AT5G48485 | 0.06027517 | undirected | NA | NA |
| ## | 1338 | AT1G78370 | AT1G20620 | 0.05553110 | undirected | NA | NA |
| ## | 1339 | AT1G78370 | AT2G27720 | 0.02981171 | undirected | NA | NA |
| ## | 1340 | AT1G78370 | AT4G15000 | 0.06561531 | undirected | NA | NA |
| ## | 1341 | AT1G78370 | AT5G20290 | 0.15058348 | undirected | NA | NA |
| ## | 1342 | AT1G78370 | AT4G31700 | 0.02952073 | undirected | NA | NA |
| ## | 1343 | AT1G78370 | AT3G04400 | 0.10470181 | undirected | NA | NA |
| ## | 1344 | AT1G78370 | AT3G02230 | 0.03988972 | undirected | NA | NA |
| ## | 1345 | AT1G78370 | AT1G54410 | 0.06738121 | undirected | NA | NA |
| ## | 1346 | AT1G78370 | AT3G24830 | 0.03100523 | undirected | NA | NA |
| ## | 1347 | AT1G78370 | AT1G48920 | 0.09403067 | undirected | NA | NA |
| ## | 1348 | AT1G78370 | AT3G08770 | 0.07280118 | undirected | NA | NA |
| ## | 1349 | AT1G78370 | AT3G05590 | 0.03724994 | undirected | NA | NA |
| ## | 1350 | AT1G78370 | AT4G38680 | 0.07611976 | undirected | NA | NA |
| ## | 1351 | AT1G78370 | AT3G04840 | 0.04821865 | undirected | NA | NA |
| ## | 1352 | AT1G78370 | AT2G28790 | 0.07562565 | undirected | NA | NA |
| ## | 1353 | AT1G78370 | AT1G70600 | 0.03768225 | undirected | NA | NA |
| ## | 1354 | AT1G78370 | AT4G27090 | 0.08664402 | undirected | NA | NA |
| ## | 1355 | AT1G78370 | AT1G77510 | 0.05607681 | undirected | NA | NA |
| ## | 1356 | AT1G78370 | AT5G56030 | 0.06663366 | undirected | NA | NA |
| ## | 1357 | AT1G78370 | AT2G41840 | 0.03432006 | undirected | NA | NA |
| ## | 1358 | AT1G78370 | AT3G60245 | 0.07580154 | undirected | NA | NA |
| ## | 1359 | AT1G78370 | AT2G42840 | 0.08157863 | undirected | NA | NA |
| ## | 1360 | AT1G78370 | AT1G72370 | 0.14012248 | undirected | NA | NA |
| ## | 1361 | AT1G78370 | AT2G05520 | 0.06382762 | undirected | NA | NA |
| ## | 1362 | AT1G78370 | AT4G22513 | 0.04334119 | undirected | NA | NA |
| ## | 1363 | AT1G78370 | AT4G22530 | 0.05150502 | undirected | NA | NA |
| ## | 1364 | AT1G78370 | ATCG01210 | 0.04247577 | undirected | NA | NA |
| ## | 1365 | AT4G22510 | AT1G07590 | 0.23001461 | undirected | NA | NA |
| ## | 1366 | AT4G22510 | AT3G12145 | 0.27790112 | undirected | NA | NA |
| ## | 1367 | AT4G22510 | AT5G54770 | 0.18144551 | undirected | NA | NA |
| ## | 1368 | AT4G22510 | AT1G67090 | 0.25238787 | undirected | NA | NA |
| ## | 1369 | AT4G22510 | AT1G62500 | 0.23560962 | undirected | NA | NA |
| ## | 1370 | AT4G22510 | AT2G38540 | 0.13221965 | undirected | NA | NA |
| ## | 1371 | AT4G22510 | AT1G13710 | 0.24880584 | undirected | NA | NA |
| ## | 1372 | AT4G22510 | AT4G03210 | 0.20115475 | undirected | NA | NA |
| ## | 1373 | AT4G22510 | AT3G22121 | 0.25847417 | undirected | NA | NA |
| ## | 1374 | AT4G22510 | AT5G09220 | 0.18012678 | undirected | NA | NA |
| ## | 1375 | AT4G22510 | AT4G22517 | 0.12982427 | undirected | NA | NA |
| ## | 1376 | AT4G22510 | AT3G16640 | 0.23131021 | undirected | NA | NA |
| ## | 1377 | AT4G22510 | AT4G34870 | 0.26578386 | undirected | NA | NA |
| ## | 1378 | AT4G22510 | AT4G29030 | 0.10983153 | undirected | NA | NA |
| ## | 1379 | AT4G22510 | AT2G02100 | 0.23250916 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1380 | AT4G22510 | AT3G05727 | 0.28550079 | undirected | NA | NA |
| ## | 1381 | AT4G22510 | AT5G27850 | 0.31912881 | undirected | NA | NA |
| ## | 1382 | AT4G22510 | AT1G43170 | 0.12894549 | undirected | NA | NA |
| ## | 1383 | AT4G22510 | AT4G22495 | 0.24261906 | undirected | NA | NA |
| ## | 1384 | AT4G22510 | AT3G09200 | 0.25050327 | undirected | NA | NA |
| ## | 1385 | AT4G22510 | AT1G14320 | 0.21415727 | undirected | NA | NA |
| ## | 1386 | AT4G22510 | AT1G13930 | 0.25444589 | undirected | NA | NA |
| ## | 1387 | AT4G22510 | AT2G36530 | 0.10823260 | undirected | NA | NA |
| ## | 1388 | AT4G22510 | AT3G49910 | 0.18754089 | undirected | NA | NA |
| ## | 1389 | AT4G22510 | AT2G34480 | 0.26274273 | undirected | NA | NA |
| ## | 1390 | AT4G22510 | AT5G02960 | 0.21548884 | undirected | NA | NA |
| ## | 1391 | AT4G22510 | AT2G18020 | 0.29622363 | undirected | NA | NA |
| ## | 1392 | AT4G22510 | AT1G13440 | 0.26562499 | undirected | NA | NA |
| ## | 1393 | AT4G22510 | AT2G16600 | 0.25478423 | undirected | NA | NA |
| ## | 1394 | AT4G22510 | AT1G07920 | 0.21580174 | undirected | NA | NA |
| ## | 1395 | AT4G22510 | AT1G04410 | 0.22445028 | undirected | NA | NA |
| ## | 1396 | AT4G22510 | AT2G36830 | 0.24155720 | undirected | NA | NA |
| ## | 1397 | AT4G22510 | AT3G15353 | 0.14812054 | undirected | NA | NA |
| ## | 1398 | AT4G22510 | AT1G62480 | 0.23385866 | undirected | NA | NA |
| ## | 1399 | AT4G22510 | AT5G38940 | 0.29088738 | undirected | NA | NA |
| ## | 1400 | AT4G22510 | ATCG01180 | 0.27643573 | undirected | NA | NA |
| ## | 1401 | AT4G22510 | AT1G07930 | 0.26251900 | undirected | NA | NA |
| ## | 1402 | AT4G22510 | ATCG00950 | 0.23121041 | undirected | NA | NA |
| ## | 1403 | AT4G22510 | AT3G13920 | 0.19709663 | undirected | NA | NA |
| ## | 1404 | AT4G22510 | AT1G28290 | 0.19812534 | undirected | NA | NA |
| ## | 1405 | AT4G22510 | AT1G04270 | 0.25835008 | undirected | NA | NA |
| ## | 1406 | AT4G22510 | AT4G35100 | 0.28830660 | undirected | NA | NA |
| ## | 1407 | AT4G22510 | AT5G48480 | 0.24908254 | undirected | NA | NA |
| ## | 1408 | AT4G22510 | AT1G52400 | 0.15854137 | undirected | NA | NA |
| ## | 1409 | AT4G22510 | AT3G02470 | 0.12555837 | undirected | NA | NA |
| ## | 1410 | AT4G22510 | AT5G15200 | 0.32588973 | undirected | NA | NA |
| ## | 1411 | AT4G22510 | AT5G48485 | 0.22929671 | undirected | NA | NA |
| ## | 1412 | AT4G22510 | AT1G20620 | 0.24400485 | undirected | NA | NA |
| ## | 1413 | AT4G22510 | AT2G27720 | 0.19869925 | undirected | NA | NA |
| ## | 1414 | AT4G22510 | AT5G02870 | 0.19328710 | undirected | NA | NA |
| ## | 1415 | AT4G22510 | AT4G15000 | 0.28142073 | undirected | NA | NA |
| ## | 1416 | AT4G22510 | AT5G20290 | 0.22461752 | undirected | NA | NA |
| ## | 1417 | AT4G22510 | AT4G31700 | 0.17361939 | undirected | NA | NA |
| ## | 1418 | AT4G22510 | AT3G04400 | 0.07865860 | undirected | NA | NA |
| ## | 1419 | AT4G22510 | AT3G02230 | 0.27767710 | undirected | NA | NA |
| ## | 1420 | AT4G22510 | AT1G54410 | 0.26269944 | undirected | NA | NA |
| ## | 1421 | AT4G22510 | AT3G24830 | 0.31565785 | undirected | NA | NA |
| ## | 1422 | AT4G22510 | AT1G48920 | 0.07215130 | undirected | NA | NA |
| ## | 1423 | AT4G22510 | AT3G08770 | 0.24288480 | undirected | NA | NA |
| ## | 1424 | AT4G22510 | AT3G05590 | 0.33618315 | undirected | NA | NA |
| ## | 1425 | AT4G22510 | AT4G38680 | 0.26057754 | undirected | NA | NA |
| ## | 1426 | AT4G22510 | AT3G04840 | 0.17531287 | undirected | NA | NA |
| ## | 1427 | AT4G22510 | AT2G28790 | 0.14126758 | undirected | NA | NA |
| ## | 1428 | AT4G22510 | AT1G70600 | 0.23909136 | undirected | NA | NA |
| ## | 1429 | AT4G22510 | AT4G27090 | 0.27234021 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1430 | AT4G22510 | AT1G77510 | 0.27176506 | undirected | NA | NA |
| ## | 1431 | AT4G22510 | AT1G70830 | 0.14306988 | undirected | NA | NA |
| ## | 1432 | AT4G22510 | AT1G15690 | 0.19634933 | undirected | NA | NA |
| ## | 1433 | AT4G22510 | AT3G52590 | 0.12564030 | undirected | NA | NA |
| ## | 1434 | AT4G22510 | AT5G07090 | 0.21333447 | undirected | NA | NA |
| ## | 1435 | AT4G22510 | AT5G17920 | 0.10632230 | undirected | NA | NA |
| ## | 1436 | AT4G22510 | AT5G56030 | 0.29540887 | undirected | NA | NA |
| ## | 1437 | AT4G22510 | AT2G41840 | 0.22858589 | undirected | NA | NA |
| ## | 1438 | AT4G22510 | AT3G60245 | 0.25837031 | undirected | NA | NA |
| ## | 1439 | AT4G22510 | AT2G08665 | 0.17355985 | undirected | NA | NA |
| ## | 1440 | AT4G22510 | AT2G42840 | 0.22483139 | undirected | NA | NA |
| ## | 1441 | AT4G22510 | AT1G72370 | 0.14380631 | undirected | NA | NA |
| ## | 1442 | AT4G22510 | AT2G05520 | 0.27818727 | undirected | NA | NA |
| ## | 1443 | AT4G22510 | AT4G22513 | 0.30567636 | undirected | NA | NA |
| ## | 1444 | AT4G22510 | AT4G22530 | 0.24004616 | undirected | NA | NA |
| ## | 1445 | AT4G22510 | ATCG01210 | 0.21263203 | undirected | NA | NA |
| ## | 1446 | AT4G22510 | AT3G25520 | 0.17576101 | undirected | NA | NA |
| ## | 1447 | AT1G07590 | AT3G12145 | 0.33076026 | undirected | NA | NA |
| ## | 1448 | AT1G07590 | AT5G54770 | 0.26378019 | undirected | NA | NA |
| ## | 1449 | AT1G07590 | AT1G67090 | 0.21787370 | undirected | NA | NA |
| ## | 1450 | AT1G07590 | AT1G62500 | 0.43838590 | undirected | NA | NA |
| ## | 1451 | AT1G07590 | AT2G38540 | 0.17057561 | undirected | NA | NA |
| ## | 1452 | AT1G07590 | AT1G13710 | 0.36888970 | undirected | NA | NA |
| ## | 1453 | AT1G07590 | AT4G03210 | 0.18026674 | undirected | NA | NA |
| ## | 1454 | AT1G07590 | AT3G22121 | 0.36183922 | undirected | NA | NA |
| ## | 1455 | AT1G07590 | AT5G09220 | 0.42412205 | undirected | NA | NA |
| ## | 1456 | AT1G07590 | AT4G22517 | 0.26482876 | undirected | NA | NA |
| ## | 1457 | AT1G07590 | AT3G16640 | 0.31956391 | undirected | NA | NA |
| ## | 1458 | AT1G07590 | AT4G34870 | 0.36295808 | undirected | NA | NA |
| ## | 1459 | AT1G07590 | AT4G29030 | 0.11279849 | undirected | NA | NA |
| ## | 1460 | AT1G07590 | AT2G02100 | 0.42410293 | undirected | NA | NA |
| ## | 1461 | AT1G07590 | AT3G05727 | 0.23900535 | undirected | NA | NA |
| ## | 1462 | AT1G07590 | AT5G27850 | 0.27599804 | undirected | NA | NA |
| ## | 1463 | AT1G07590 | AT1G43170 | 0.22155551 | undirected | NA | NA |
| ## | 1464 | AT1G07590 | AT4G22495 | 0.42327513 | undirected | NA | NA |
| ## | 1465 | AT1G07590 | AT3G09200 | 0.27255210 | undirected | NA | NA |
| ## | 1466 | AT1G07590 | AT1G14320 | 0.43663055 | undirected | NA | NA |
| ## | 1467 | AT1G07590 | AT1G13930 | 0.38997968 | undirected | NA | NA |
| ## | 1468 | AT1G07590 | AT2G36530 | 0.20219274 | undirected | NA | NA |
| ## | 1469 | AT1G07590 | AT3G49910 | 0.45893344 | undirected | NA | NA |
| ## | 1470 | AT1G07590 | AT2G34480 | 0.35095621 | undirected | NA | NA |
| ## | 1471 | AT1G07590 | AT5G02960 | 0.32616549 | undirected | NA | NA |
| ## | 1472 | AT1G07590 | AT2G18020 | 0.29154068 | undirected | NA | NA |
| ## | 1473 | AT1G07590 | AT1G13440 | 0.28776970 | undirected | NA | NA |
| ## | 1474 | AT1G07590 | AT2G16600 | 0.33254823 | undirected | NA | NA |
| ## | 1475 | AT1G07590 | AT1G07920 | 0.16616582 | undirected | NA | NA |
| ## | 1476 | AT1G07590 | AT1G04410 | 0.24131615 | undirected | NA | NA |
| ## | 1477 | AT1G07590 | AT2G36830 | 0.32041550 | undirected | NA | NA |
| ## | 1478 | AT1G07590 | AT3G15353 | 0.26009794 | undirected | NA | NA |
| ## | 1479 | AT1G07590 | AT1G62480 | 0.43467210 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1480 | AT1G07590 | AT5G38940 | 0.27919589 | undirected | NA | NA |
| ## | 1481 | AT1G07590 | ATCG01180 | 0.36475858 | undirected | NA | NA |
| ## | 1482 | AT1G07590 | AT1G07930 | 0.23912127 | undirected | NA | NA |
| ## | 1483 | AT1G07590 | ATCG00950 | 0.42162055 | undirected | NA | NA |
| ## | 1484 | AT1G07590 | AT3G13920 | 0.28785540 | undirected | NA | NA |
| ## | 1485 | AT1G07590 | AT1G28290 | 0.30891843 | undirected | NA | NA |
| ## | 1486 | AT1G07590 | AT1G04270 | 0.35603021 | undirected | NA | NA |
| ## | 1487 | AT1G07590 | AT4G35100 | 0.35899191 | undirected | NA | NA |
| ## | 1488 | AT1G07590 | AT5G48480 | 0.36124639 | undirected | NA | NA |
| ## | 1489 | AT1G07590 | AT1G52400 | 0.26252502 | undirected | NA | NA |
| ## | 1490 | AT1G07590 | AT3G02470 | 0.26600880 | undirected | NA | NA |
| ## | 1491 | AT1G07590 | AT5G15200 | 0.34095278 | undirected | NA | NA |
| ## | 1492 | AT1G07590 | AT5G48485 | 0.45367124 | undirected | NA | NA |
| ## | 1493 | AT1G07590 | AT1G20620 | 0.31942227 | undirected | NA | NA |
| ## | 1494 | AT1G07590 | AT2G27720 | 0.44726928 | undirected | NA | NA |
| ## | 1495 | AT1G07590 | AT5G02870 | 0.25067467 | undirected | NA | NA |
| ## | 1496 | AT1G07590 | AT4G15000 | 0.31547364 | undirected | NA | NA |
| ## | 1497 | AT1G07590 | AT5G20290 | 0.12973894 | undirected | NA | NA |
| ## | 1498 | AT1G07590 | AT4G31700 | 0.13277108 | undirected | NA | NA |
| ## | 1499 | AT1G07590 | AT3G04400 | 0.14692416 | undirected | NA | NA |
| ## | 1500 | AT1G07590 | AT3G02230 | 0.25109463 | undirected | NA | NA |
| ## | 1501 | AT1G07590 | AT1G54410 | 0.35204327 | undirected | NA | NA |
| ## | 1502 | AT1G07590 | AT3G24830 | 0.34805106 | undirected | NA | NA |
| ## | 1503 | AT1G07590 | AT1G48920 | 0.13614180 | undirected | NA | NA |
| ## | 1504 | AT1G07590 | AT3G08770 | 0.38977753 | undirected | NA | NA |
| ## | 1505 | AT1G07590 | AT3G05590 | 0.29188146 | undirected | NA | NA |
| ## | 1506 | AT1G07590 | AT4G38680 | 0.41303510 | undirected | NA | NA |
| ## | 1507 | AT1G07590 | AT3G04840 | 0.44883770 | undirected | NA | NA |
| ## | 1508 | AT1G07590 | AT2G28790 | 0.27934338 | undirected | NA | NA |
| ## | 1509 | AT1G07590 | AT1G70600 | 0.29570912 | undirected | NA | NA |
| ## | 1510 | AT1G07590 | AT4G27090 | 0.38187206 | undirected | NA | NA |
| ## | 1511 | AT1G07590 | AT1G77510 | 0.29772896 | undirected | NA | NA |
| ## | 1512 | AT1G07590 | AT1G70830 | 0.26589177 | undirected | NA | NA |
| ## | 1513 | AT1G07590 | AT1G15690 | 0.22366264 | undirected | NA | NA |
| ## | 1514 | AT1G07590 | AT3G52590 | 0.26540916 | undirected | NA | NA |
| ## | 1515 | AT1G07590 | AT5G07090 | 0.22671205 | undirected | NA | NA |
| ## | 1516 | AT1G07590 | AT5G17920 | 0.25810423 | undirected | NA | NA |
| ## | 1517 | AT1G07590 | AT5G56030 | 0.24819434 | undirected | NA | NA |
| ## | 1518 | AT1G07590 | AT2G41840 | 0.41924984 | undirected | NA | NA |
| ## | 1519 | AT1G07590 | AT3G60245 | 0.30778153 | undirected | NA | NA |
| ## | 1520 | AT1G07590 | AT2G08665 | 0.27163373 | undirected | NA | NA |
| ## | 1521 | AT1G07590 | AT3G26520 | 0.07313677 | undirected | NA | NA |
| ## | 1522 | AT1G07590 | AT2G42840 | 0.43422690 | undirected | NA | NA |
| ## | 1523 | AT1G07590 | AT1G72370 | 0.20685935 | undirected | NA | NA |
| ## | 1524 | AT1G07590 | AT2G05520 | 0.32117460 | undirected | NA | NA |
| ## | 1525 | AT1G07590 | AT4G22513 | 0.31322287 | undirected | NA | NA |
| ## | 1526 | AT1G07590 | AT4G22530 | 0.39086057 | undirected | NA | NA |
| ## | 1527 | AT1G07590 | ATCG01210 | 0.45334252 | undirected | NA | NA |
| ## | 1528 | AT1G07590 | AT3G25520 | 0.32821393 | undirected | NA | NA |
| ## | 1529 | AT3G12145 | AT5G54770 | 0.19624465 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1530 | AT3G12145 | AT1G67090 | 0.24576741 | undirected | NA | NA |
| ## | 1531 | AT3G12145 | AT1G62500 | 0.29116502 | undirected | NA | NA |
| ## | 1532 | AT3G12145 | AT2G38540 | 0.15936847 | undirected | NA | NA |
| ## | 1533 | AT3G12145 | AT1G13710 | 0.32486992 | undirected | NA | NA |
| ## | 1534 | AT3G12145 | AT4G03210 | 0.16234983 | undirected | NA | NA |
| ## | 1535 | AT3G12145 | AT3G22121 | 0.32572250 | undirected | NA | NA |
| ## | 1536 | AT3G12145 | AT5G09220 | 0.27429799 | undirected | NA | NA |
| ## | 1537 | AT3G12145 | AT4G22517 | 0.19070761 | undirected | NA | NA |
| ## | 1538 | AT3G12145 | AT3G16640 | 0.24824106 | undirected | NA | NA |
| ## | 1539 | AT3G12145 | AT4G34870 | 0.28072217 | undirected | NA | NA |
| ## | 1540 | AT3G12145 | AT4G29030 | 0.11547452 | undirected | NA | NA |
| ## | 1541 | AT3G12145 | AT2G02100 | 0.31484000 | undirected | NA | NA |
| ## | 1542 | AT3G12145 | AT3G05727 | 0.27709311 | undirected | NA | NA |
| ## | 1543 | AT3G12145 | AT5G27850 | 0.31108833 | undirected | NA | NA |
| ## | 1544 | AT3G12145 | AT1G43170 | 0.15850047 | undirected | NA | NA |
| ## | 1545 | AT3G12145 | AT4G22495 | 0.29429871 | undirected | NA | NA |
| ## | 1546 | AT3G12145 | AT3G09200 | 0.23578862 | undirected | NA | NA |
| ## | 1547 | AT3G12145 | AT1G14320 | 0.28890275 | undirected | NA | NA |
| ## | 1548 | AT3G12145 | AT1G13930 | 0.26756216 | undirected | NA | NA |
| ## | 1549 | AT3G12145 | AT2G36530 | 0.15851503 | undirected | NA | NA |
| ## | 1550 | AT3G12145 | AT3G49910 | 0.27201662 | undirected | NA | NA |
| ## | 1551 | AT3G12145 | AT2G34480 | 0.27736263 | undirected | NA | NA |
| ## | 1552 | AT3G12145 | AT5G02960 | 0.23376944 | undirected | NA | NA |
| ## | 1553 | AT3G12145 | AT2G18020 | 0.25676238 | undirected | NA | NA |
| ## | 1554 | AT3G12145 | AT1G13440 | 0.27226929 | undirected | NA | NA |
| ## | 1555 | AT3G12145 | AT2G16600 | 0.30425573 | undirected | NA | NA |
| ## | 1556 | AT3G12145 | AT1G07920 | 0.16166303 | undirected | NA | NA |
| ## | 1557 | AT3G12145 | AT1G04410 | 0.22643223 | undirected | NA | NA |
| ## | 1558 | AT3G12145 | AT2G36830 | 0.23727601 | undirected | NA | NA |
| ## | 1559 | AT3G12145 | AT3G15353 | 0.20426224 | undirected | NA | NA |
| ## | 1560 | AT3G12145 | AT1G62480 | 0.29404450 | undirected | NA | NA |
| ## | 1561 | AT3G12145 | AT5G38940 | 0.30217305 | undirected | NA | NA |
| ## | 1562 | AT3G12145 | ATCG01180 | 0.28356667 | undirected | NA | NA |
| ## | 1563 | AT3G12145 | AT1G07930 | 0.21561416 | undirected | NA | NA |
| ## | 1564 | AT3G12145 | ATCG00950 | 0.28411648 | undirected | NA | NA |
| ## | 1565 | AT3G12145 | AT3G13920 | 0.21263885 | undirected | NA | NA |
| ## | 1566 | AT3G12145 | AT1G28290 | 0.22265481 | undirected | NA | NA |
| ## | 1567 | AT3G12145 | AT1G04270 | 0.27212054 | undirected | NA | NA |
| ## | 1568 | AT3G12145 | AT4G35100 | 0.34294477 | undirected | NA | NA |
| ## | 1569 | AT3G12145 | AT5G48480 | 0.26704009 | undirected | NA | NA |
| ## | 1570 | AT3G12145 | AT1G52400 | 0.18021356 | undirected | NA | NA |
| ## | 1571 | AT3G12145 | AT3G02470 | 0.18233321 | undirected | NA | NA |
| ## | 1572 | AT3G12145 | AT5G15200 | 0.35200438 | undirected | NA | NA |
| ## | 1573 | AT3G12145 | AT5G48485 | 0.29325678 | undirected | NA | NA |
| ## | 1574 | AT3G12145 | AT1G20620 | 0.24726022 | undirected | NA | NA |
| ## | 1575 | AT3G12145 | AT2G27720 | 0.27510936 | undirected | NA | NA |
| ## | 1576 | AT3G12145 | AT5G02870 | 0.19589568 | undirected | NA | NA |
| ## | 1577 | AT3G12145 | AT4G15000 | 0.32092111 | undirected | NA | NA |
| ## | 1578 | AT3G12145 | AT5G20290 | 0.15659729 | undirected | NA | NA |
| ## | 1579 | AT3G12145 | AT4G31700 | 0.12931587 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1580 | AT3G12145 | AT3G04400 | 0.10213841 | undirected | NA | NA |
| ## | 1581 | AT3G12145 | AT3G02230 | 0.24691666 | undirected | NA | NA |
| ## | 1582 | AT3G12145 | AT1G54410 | 0.30614402 | undirected | NA | NA |
| ## | 1583 | AT3G12145 | AT3G24830 | 0.35263573 | undirected | NA | NA |
| ## | 1584 | AT3G12145 | AT1G48920 | 0.10755466 | undirected | NA | NA |
| ## | 1585 | AT3G12145 | AT3G08770 | 0.29295289 | undirected | NA | NA |
| ## | 1586 | AT3G12145 | AT3G05590 | 0.32709191 | undirected | NA | NA |
| ## | 1587 | AT3G12145 | AT4G38680 | 0.29791414 | undirected | NA | NA |
| ## | 1588 | AT3G12145 | AT3G04840 | 0.25947531 | undirected | NA | NA |
| ## | 1589 | AT3G12145 | AT2G28790 | 0.19509934 | undirected | NA | NA |
| ## | 1590 | AT3G12145 | AT1G70600 | 0.22962886 | undirected | NA | NA |
| ## | 1591 | AT3G12145 | AT4G27090 | 0.29390661 | undirected | NA | NA |
| ## | 1592 | AT3G12145 | AT1G77510 | 0.23730239 | undirected | NA | NA |
| ## | 1593 | AT3G12145 | AT1G70830 | 0.17498946 | undirected | NA | NA |
| ## | 1594 | AT3G12145 | AT1G15690 | 0.19102695 | undirected | NA | NA |
| ## | 1595 | AT3G12145 | AT3G52590 | 0.17486840 | undirected | NA | NA |
| ## | 1596 | AT3G12145 | AT5G07090 | 0.20144132 | undirected | NA | NA |
| ## | 1597 | AT3G12145 | AT5G17920 | 0.15248789 | undirected | NA | NA |
| ## | 1598 | AT3G12145 | AT5G56030 | 0.27501290 | undirected | NA | NA |
| ## | 1599 | AT3G12145 | AT2G41840 | 0.31675512 | undirected | NA | NA |
| ## | 1600 | AT3G12145 | AT3G60245 | 0.23879432 | undirected | NA | NA |
| ## | 1601 | AT3G12145 | AT2G08665 | 0.19891995 | undirected | NA | NA |
| ## | 1602 | AT3G12145 | AT3G26520 | 0.04188532 | undirected | NA | NA |
| ## | 1603 | AT3G12145 | AT2G42840 | 0.29595147 | undirected | NA | NA |
| ## | 1604 | AT3G12145 | AT1G72370 | 0.17612083 | undirected | NA | NA |
| ## | 1605 | AT3G12145 | AT2G05520 | 0.32047264 | undirected | NA | NA |
| ## | 1606 | AT3G12145 | AT4G22513 | 0.32811926 | undirected | NA | NA |
| ## | 1607 | AT3G12145 | AT4G22530 | 0.28061881 | undirected | NA | NA |
| ## | 1608 | AT3G12145 | ATCG01210 | 0.28709578 | undirected | NA | NA |
| ## | 1609 | AT3G12145 | AT3G25520 | 0.21903276 | undirected | NA | NA |
| ## | 1610 | AT5G54770 | AT1G67090 | 0.26399157 | undirected | NA | NA |
| ## | 1611 | AT5G54770 | AT1G62500 | 0.19344632 | undirected | NA | NA |
| ## | 1612 | AT5G54770 | AT2G38540 | 0.04810707 | undirected | NA | NA |
| ## | 1613 | AT5G54770 | AT1G13710 | 0.33409538 | undirected | NA | NA |
| ## | 1614 | AT5G54770 | AT4G03210 | 0.22112191 | undirected | NA | NA |
| ## | 1615 | AT5G54770 | AT3G22121 | 0.25979184 | undirected | NA | NA |
| ## | 1616 | AT5G54770 | AT5G09220 | 0.15035445 | undirected | NA | NA |
| ## | 1617 | AT5G54770 | AT4G22517 | 0.05831911 | undirected | NA | NA |
| ## | 1618 | AT5G54770 | AT3G16640 | 0.28262373 | undirected | NA | NA |
| ## | 1619 | AT5G54770 | AT4G34870 | 0.11387385 | undirected | NA | NA |
| ## | 1620 | AT5G54770 | AT4G29030 | 0.03464680 | undirected | NA | NA |
| ## | 1621 | AT5G54770 | AT2G02100 | 0.24396285 | undirected | NA | NA |
| ## | 1622 | AT5G54770 | AT3G05727 | 0.29034687 | undirected | NA | NA |
| ## | 1623 | AT5G54770 | AT5G27850 | 0.24284560 | undirected | NA | NA |
| ## | 1624 | AT5G54770 | AT1G43170 | 0.27314411 | undirected | NA | NA |
| ## | 1625 | AT5G54770 | AT4G22495 | 0.14118874 | undirected | NA | NA |
| ## | 1626 | AT5G54770 | AT3G09200 | 0.17819445 | undirected | NA | NA |
| ## | 1627 | AT5G54770 | AT1G14320 | 0.12142453 | undirected | NA | NA |
| ## | 1628 | AT5G54770 | AT1G13930 | 0.16693788 | undirected | NA | NA |
| ## | 1629 | AT5G54770 | AT2G36530 | 0.05746883 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1630 | AT5G54770 | AT3G49910 | 0.12335731 | undirected | NA | NA |
| ## | 1631 | AT5G54770 | AT2G34480 | 0.21835207 | undirected | NA | NA |
| ## | 1632 | AT5G54770 | AT5G02960 | 0.26686420 | undirected | NA | NA |
| ## | 1633 | AT5G54770 | AT2G18020 | 0.15604708 | undirected | NA | NA |
| ## | 1634 | AT5G54770 | AT1G13440 | 0.26525889 | undirected | NA | NA |
| ## | 1635 | AT5G54770 | AT2G16600 | 0.24140819 | undirected | NA | NA |
| ## | 1636 | AT5G54770 | AT1G07920 | 0.19979496 | undirected | NA | NA |
| ## | 1637 | AT5G54770 | AT1G04410 | 0.09269772 | undirected | NA | NA |
| ## | 1638 | AT5G54770 | AT2G36830 | 0.21292430 | undirected | NA | NA |
| ## | 1639 | AT5G54770 | AT3G15353 | 0.07722980 | undirected | NA | NA |
| ## | 1640 | AT5G54770 | AT1G62480 | 0.13364962 | undirected | NA | NA |
| ## | 1641 | AT5G54770 | AT5G38940 | 0.30600664 | undirected | NA | NA |
| ## | 1642 | AT5G54770 | ATCG01180 | 0.15298455 | undirected | NA | NA |
| ## | 1643 | AT5G54770 | AT1G07930 | 0.14034005 | undirected | NA | NA |
| ## | 1644 | AT5G54770 | ATCG00950 | 0.24286075 | undirected | NA | NA |
| ## | 1645 | AT5G54770 | AT3G13920 | 0.29285873 | undirected | NA | NA |
| ## | 1646 | AT5G54770 | AT1G28290 | 0.18506562 | undirected | NA | NA |
| ## | 1647 | AT5G54770 | AT1G04270 | 0.21618216 | undirected | NA | NA |
| ## | 1648 | AT5G54770 | AT4G35100 | 0.26985286 | undirected | NA | NA |
| ## | 1649 | AT5G54770 | AT5G48480 | 0.19225240 | undirected | NA | NA |
| ## | 1650 | AT5G54770 | AT1G52400 | 0.20468476 | undirected | NA | NA |
| ## | 1651 | AT5G54770 | AT3G02470 | 0.05387448 | undirected | NA | NA |
| ## | 1652 | AT5G54770 | AT5G15200 | 0.34067826 | undirected | NA | NA |
| ## | 1653 | AT5G54770 | AT5G48485 | 0.15048922 | undirected | NA | NA |
| ## | 1654 | AT5G54770 | AT1G20620 | 0.18489209 | undirected | NA | NA |
| ## | 1655 | AT5G54770 | AT2G27720 | 0.18703060 | undirected | NA | NA |
| ## | 1656 | AT5G54770 | AT5G02870 | 0.24972093 | undirected | NA | NA |
| ## | 1657 | AT5G54770 | AT4G15000 | 0.29611346 | undirected | NA | NA |
| ## | 1658 | AT5G54770 | AT5G20290 | 0.05318820 | undirected | NA | NA |
| ## | 1659 | AT5G54770 | AT4G31700 | 0.16358762 | undirected | NA | NA |
| ## | 1660 | AT5G54770 | AT3G04400 | 0.03810271 | undirected | NA | NA |
| ## | 1661 | AT5G54770 | AT3G02230 | 0.20288414 | undirected | NA | NA |
| ## | 1662 | AT5G54770 | AT1G54410 | 0.27200375 | undirected | NA | NA |
| ## | 1663 | AT5G54770 | AT3G24830 | 0.29640724 | undirected | NA | NA |
| ## | 1664 | AT5G54770 | AT1G48920 | 0.03989142 | undirected | NA | NA |
| ## | 1665 | AT5G54770 | AT3G08770 | 0.18275341 | undirected | NA | NA |
| ## | 1666 | AT5G54770 | AT3G05590 | 0.34366825 | undirected | NA | NA |
| ## | 1667 | AT5G54770 | AT4G38680 | 0.17292485 | undirected | NA | NA |
| ## | 1668 | AT5G54770 | AT3G04840 | 0.12125576 | undirected | NA | NA |
| ## | 1669 | AT5G54770 | AT2G28790 | 0.06407626 | undirected | NA | NA |
| ## | 1670 | AT5G54770 | AT1G70600 | 0.22358968 | undirected | NA | NA |
| ## | 1671 | AT5G54770 | AT4G27090 | 0.18685458 | undirected | NA | NA |
| ## | 1672 | AT5G54770 | AT1G77510 | 0.14250559 | undirected | NA | NA |
| ## | 1673 | AT5G54770 | AT1G70830 | 0.04920996 | undirected | NA | NA |
| ## | 1674 | AT5G54770 | AT1G15690 | 0.19587010 | undirected | NA | NA |
| ## | 1675 | AT5G54770 | AT3G52590 | 0.06318395 | undirected | NA | NA |
| ## | 1676 | AT5G54770 | AT5G07090 | 0.27039905 | undirected | NA | NA |
| ## | 1677 | AT5G54770 | AT5G17920 | 0.03657962 | undirected | NA | NA |
| ## | 1678 | AT5G54770 | AT5G56030 | 0.20920330 | undirected | NA | NA |
| ## | 1679 | AT5G54770 | AT2G41840 | 0.23016055 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1680 | AT5G54770 | AT3G60245 | 0.15898075 | undirected | NA | NA |
| ## | 1681 | AT5G54770 | AT2G08665 | 0.22084981 | undirected | NA | NA |
| ## | 1682 | AT5G54770 | AT2G42840 | 0.13690113 | undirected | NA | NA |
| ## | 1683 | AT5G54770 | AT1G72370 | 0.07786984 | undirected | NA | NA |
| ## | 1684 | AT5G54770 | AT2G05520 | 0.25943484 | undirected | NA | NA |
| ## | 1685 | AT5G54770 | AT4G22513 | 0.24688331 | undirected | NA | NA |
| ## | 1686 | AT5G54770 | AT4G22530 | 0.23313817 | undirected | NA | NA |
| ## | 1687 | AT5G54770 | ATCG01210 | 0.18316062 | undirected | NA | NA |
| ## | 1688 | AT5G54770 | AT3G25520 | 0.24002366 | undirected | NA | NA |
| ## | 1689 | AT1G67090 | AT1G62500 | 0.21493185 | undirected | NA | NA |
| ## | 1690 | AT1G67090 | AT2G38540 | 0.11329202 | undirected | NA | NA |
| ## | 1691 | AT1G67090 | AT1G13710 | 0.27949723 | undirected | NA | NA |
| ## | 1692 | AT1G67090 | AT4G03210 | 0.28436071 | undirected | NA | NA |
| ## | 1693 | AT1G67090 | AT3G22121 | 0.24694389 | undirected | NA | NA |
| ## | 1694 | AT1G67090 | AT5G09220 | 0.18306484 | undirected | NA | NA |
| ## | 1695 | AT1G67090 | AT4G22517 | 0.10191805 | undirected | NA | NA |
| ## | 1696 | AT1G67090 | AT3G16640 | 0.27332471 | undirected | NA | NA |
| ## | 1697 | AT1G67090 | AT4G34870 | 0.20849625 | undirected | NA | NA |
| ## | 1698 | AT1G67090 | AT4G29030 | 0.09379948 | undirected | NA | NA |
| ## | 1699 | AT1G67090 | AT2G02100 | 0.22092072 | undirected | NA | NA |
| ## | 1700 | AT1G67090 | AT3G05727 | 0.33549127 | undirected | NA | NA |
| ## | 1701 | AT1G67090 | AT5G27850 | 0.30060526 | undirected | NA | NA |
| ## | 1702 | AT1G67090 | AT1G43170 | 0.24552295 | undirected | NA | NA |
| ## | 1703 | AT1G67090 | AT4G22495 | 0.21716074 | undirected | NA | NA |
| ## | 1704 | AT1G67090 | AT3G09200 | 0.27317358 | undirected | NA | NA |
| ## | 1705 | AT1G67090 | AT1G14320 | 0.17678016 | undirected | NA | NA |
| ## | 1706 | AT1G67090 | AT1G13930 | 0.22721792 | undirected | NA | NA |
| ## | 1707 | AT1G67090 | AT2G36530 | 0.10207937 | undirected | NA | NA |
| ## | 1708 | AT1G67090 | AT3G49910 | 0.15223230 | undirected | NA | NA |
| ## | 1709 | AT1G67090 | AT2G34480 | 0.28796916 | undirected | NA | NA |
| ## | 1710 | AT1G67090 | AT5G02960 | 0.26142892 | undirected | NA | NA |
| ## | 1711 | AT1G67090 | AT2G18020 | 0.24949591 | undirected | NA | NA |
| ## | 1712 | AT1G67090 | AT1G13440 | 0.30074341 | undirected | NA | NA |
| ## | 1713 | AT1G67090 | AT2G16600 | 0.22861187 | undirected | NA | NA |
| ## | 1714 | AT1G67090 | AT1G07920 | 0.29318834 | undirected | NA | NA |
| ## | 1715 | AT1G67090 | AT1G04410 | 0.20090487 | undirected | NA | NA |
| ## | 1716 | AT1G67090 | AT2G36830 | 0.27195138 | undirected | NA | NA |
| ## | 1717 | AT1G67090 | AT3G15353 | 0.14032505 | undirected | NA | NA |
| ## | 1718 | AT1G67090 | AT1G62480 | 0.20699849 | undirected | NA | NA |
| ## | 1719 | AT1G67090 | AT5G38940 | 0.32137344 | undirected | NA | NA |
| ## | 1720 | AT1G67090 | ATCG01180 | 0.26040805 | undirected | NA | NA |
| ## | 1721 | AT1G67090 | AT1G07930 | 0.27725141 | undirected | NA | NA |
| ## | 1722 | AT1G67090 | ATCG00950 | 0.23789344 | undirected | NA | NA |
| ## | 1723 | AT1G67090 | AT3G13920 | 0.26447360 | undirected | NA | NA |
| ## | 1724 | AT1G67090 | AT1G28290 | 0.24476873 | undirected | NA | NA |
| ## | 1725 | AT1G67090 | AT1G04270 | 0.27669122 | undirected | NA | NA |
| ## | 1726 | AT1G67090 | AT4G35100 | 0.27887354 | undirected | NA | NA |
| ## | 1727 | AT1G67090 | AT5G48480 | 0.27461788 | undirected | NA | NA |
| ## | 1728 | AT1G67090 | AT1G52400 | 0.21640863 | undirected | NA | NA |
| ## | 1729 | AT1G67090 | AT3G02470 | 0.07700148 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1730 | AT1G67090 | AT5G15200 | 0.35499068 | undirected | NA | NA |
| ## | 1731 | AT1G67090 | AT5G48485 | 0.20499188 | undirected | NA | NA |
| ## | 1732 | AT1G67090 | AT1G20620 | 0.28622079 | undirected | NA | NA |
| ## | 1733 | AT1G67090 | AT2G27720 | 0.21944879 | undirected | NA | NA |
| ## | 1734 | AT1G67090 | AT5G02870 | 0.27304130 | undirected | NA | NA |
| ## | 1735 | AT1G67090 | AT4G15000 | 0.30929277 | undirected | NA | NA |
| ## | 1736 | AT1G67090 | AT5G20290 | 0.16543542 | undirected | NA | NA |
| ## | 1737 | AT1G67090 | AT4G31700 | 0.27065242 | undirected | NA | NA |
| ## | 1738 | AT1G67090 | AT3G04400 | 0.07153892 | undirected | NA | NA |
| ## | 1739 | AT1G67090 | AT3G02230 | 0.25689520 | undirected | NA | NA |
| ## | 1740 | AT1G67090 | AT1G54410 | 0.27050774 | undirected | NA | NA |
| ## | 1741 | AT1G67090 | AT3G24830 | 0.30921327 | undirected | NA | NA |
| ## | 1742 | AT1G67090 | AT1G48920 | 0.07573718 | undirected | NA | NA |
| ## | 1743 | AT1G67090 | AT3G08770 | 0.27401320 | undirected | NA | NA |
| ## | 1744 | AT1G67090 | AT3G05590 | 0.37778506 | undirected | NA | NA |
| ## | 1745 | AT1G67090 | AT4G38680 | 0.25100161 | undirected | NA | NA |
| ## | 1746 | AT1G67090 | AT3G04840 | 0.15343811 | undirected | NA | NA |
| ## | 1747 | AT1G67090 | AT2G28790 | 0.10872967 | undirected | NA | NA |
| ## | 1748 | AT1G67090 | AT1G70600 | 0.28275328 | undirected | NA | NA |
| ## | 1749 | AT1G67090 | AT4G27090 | 0.26262802 | undirected | NA | NA |
| ## | 1750 | AT1G67090 | AT1G77510 | 0.26348811 | undirected | NA | NA |
| ## | 1751 | AT1G67090 | AT1G70830 | 0.06995861 | undirected | NA | NA |
| ## | 1752 | AT1G67090 | AT1G15690 | 0.27051584 | undirected | NA | NA |
| ## | 1753 | AT1G67090 | AT3G52590 | 0.07565960 | undirected | NA | NA |
| ## | 1754 | AT1G67090 | AT5G07090 | 0.26494275 | undirected | NA | NA |
| ## | 1755 | AT1G67090 | AT5G17920 | 0.05089454 | undirected | NA | NA |
| ## | 1756 | AT1G67090 | AT5G56030 | 0.25946152 | undirected | NA | NA |
| ## | 1757 | AT1G67090 | AT2G41840 | 0.20197956 | undirected | NA | NA |
| ## | 1758 | AT1G67090 | AT3G60245 | 0.27574721 | undirected | NA | NA |
| ## | 1759 | AT1G67090 | AT2G08665 | 0.27807117 | undirected | NA | NA |
| ## | 1760 | AT1G67090 | AT2G42840 | 0.20320391 | undirected | NA | NA |
| ## | 1761 | AT1G67090 | AT1G72370 | 0.15870794 | undirected | NA | NA |
| ## | 1762 | AT1G67090 | AT2G05520 | 0.26867548 | undirected | NA | NA |
| ## | 1763 | AT1G67090 | AT4G22513 | 0.28187887 | undirected | NA | NA |
| ## | 1764 | AT1G67090 | AT4G22530 | 0.25382408 | undirected | NA | NA |
| ## | 1765 | AT1G67090 | ATCG01210 | 0.19859710 | undirected | NA | NA |
| ## | 1766 | AT1G67090 | AT3G25520 | 0.25681610 | undirected | NA | NA |
| ## | 1767 | AT1G62500 | AT2G38540 | 0.25634765 | undirected | NA | NA |
| ## | 1768 | AT1G62500 | AT1G13710 | 0.37650455 | undirected | NA | NA |
| ## | 1769 | AT1G62500 | AT4G03210 | 0.13082073 | undirected | NA | NA |
| ## | 1770 | AT1G62500 | AT3G22121 | 0.39078485 | undirected | NA | NA |
| ## | 1771 | AT1G62500 | AT5G09220 | 0.41602509 | undirected | NA | NA |
| ## | 1772 | AT1G62500 | AT4G22517 | 0.35931717 | undirected | NA | NA |
| ## | 1773 | AT1G62500 | AT3G16640 | 0.28207963 | undirected | NA | NA |
| ## | 1774 | AT1G62500 | AT4G34870 | 0.38566669 | undirected | NA | NA |
| ## | 1775 | AT1G62500 | AT4G29030 | 0.18108834 | undirected | NA | NA |
| ## | 1776 | AT1G62500 | AT2G02100 | 0.44593145 | undirected | NA | NA |
| ## | 1777 | AT1G62500 | AT3G05727 | 0.25147473 | undirected | NA | NA |
| ## | 1778 | AT1G62500 | AT5G27850 | 0.28682627 | undirected | NA | NA |
| ## | 1779 | AT1G62500 | AT1G43170 | 0.17355769 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1780 | AT1G62500 | AT4G22495 | 0.43756218 | undirected | NA | NA |
| ## | 1781 | AT1G62500 | AT3G09200 | 0.21777625 | undirected | NA | NA |
| ## | 1782 | AT1G62500 | AT1G14320 | 0.45216046 | undirected | NA | NA |
| ## | 1783 | AT1G62500 | AT1G13930 | 0.36036868 | undirected | NA | NA |
| ## | 1784 | AT1G62500 | AT2G36530 | 0.29548873 | undirected | NA | NA |
| ## | 1785 | AT1G62500 | AT3G49910 | 0.44416364 | undirected | NA | NA |
| ## | 1786 | AT1G62500 | AT2G34480 | 0.32361980 | undirected | NA | NA |
| ## | 1787 | AT1G62500 | AT5G02960 | 0.26480758 | undirected | NA | NA |
| ## | 1788 | AT1G62500 | AT2G18020 | 0.24772105 | undirected | NA | NA |
| ## | 1789 | AT1G62500 | AT1G13440 | 0.29845646 | undirected | NA | NA |
| ## | 1790 | AT1G62500 | AT2G16600 | 0.33367111 | undirected | NA | NA |
| ## | 1791 | AT1G62500 | AT1G07920 | 0.12343147 | undirected | NA | NA |
| ## | 1792 | AT1G62500 | AT1G04410 | 0.29697055 | undirected | NA | NA |
| ## | 1793 | AT1G62500 | AT2G36830 | 0.28695577 | undirected | NA | NA |
| ## | 1794 | AT1G62500 | AT3G15353 | 0.34871495 | undirected | NA | NA |
| ## | 1795 | AT1G62500 | AT1G62480 | 0.45504476 | undirected | NA | NA |
| ## | 1796 | AT1G62500 | AT5G38940 | 0.27626414 | undirected | NA | NA |
| ## | 1797 | AT1G62500 | ATCG01180 | 0.35350053 | undirected | NA | NA |
| ## | 1798 | AT1G62500 | AT1G07930 | 0.24505537 | undirected | NA | NA |
| ## | 1799 | AT1G62500 | ATCG00950 | 0.40167635 | undirected | NA | NA |
| ## | 1800 | AT1G62500 | AT3G13920 | 0.23002864 | undirected | NA | NA |
| ## | 1801 | AT1G62500 | AT1G28290 | 0.24101598 | undirected | NA | NA |
| ## | 1802 | AT1G62500 | AT1G04270 | 0.32659872 | undirected | NA | NA |
| ## | 1803 | AT1G62500 | AT4G35100 | 0.40316302 | undirected | NA | NA |
| ## | 1804 | AT1G62500 | AT5G48480 | 0.33403338 | undirected | NA | NA |
| ## | 1805 | AT1G62500 | AT1G52400 | 0.16897183 | undirected | NA | NA |
| ## | 1806 | AT1G62500 | AT3G02470 | 0.29286629 | undirected | NA | NA |
| ## | 1807 | AT1G62500 | AT5G15200 | 0.34776998 | undirected | NA | NA |
| ## | 1808 | AT1G62500 | AT5G48485 | 0.43892070 | undirected | NA | NA |
| ## | 1809 | AT1G62500 | AT1G20620 | 0.29572179 | undirected | NA | NA |
| ## | 1810 | AT1G62500 | AT2G27720 | 0.40242243 | undirected | NA | NA |
| ## | 1811 | AT1G62500 | AT5G02870 | 0.17470781 | undirected | NA | NA |
| ## | 1812 | AT1G62500 | AT4G15000 | 0.34735218 | undirected | NA | NA |
| ## | 1813 | AT1G62500 | AT5G20290 | 0.15802615 | undirected | NA | NA |
| ## | 1814 | AT1G62500 | AT4G31700 | 0.10387378 | undirected | NA | NA |
| ## | 1815 | AT1G62500 | AT3G04400 | 0.22791346 | undirected | NA | NA |
| ## | 1816 | AT1G62500 | AT3G02230 | 0.21808701 | undirected | NA | NA |
| ## | 1817 | AT1G62500 | AT1G54410 | 0.37980955 | undirected | NA | NA |
| ## | 1818 | AT1G62500 | AT3G24830 | 0.34606817 | undirected | NA | NA |
| ## | 1819 | AT1G62500 | AT1G48920 | 0.22366282 | undirected | NA | NA |
| ## | 1820 | AT1G62500 | AT3G08770 | 0.37456645 | undirected | NA | NA |
| ## | 1821 | AT1G62500 | AT3G05590 | 0.27302255 | undirected | NA | NA |
| ## | 1822 | AT1G62500 | AT4G38680 | 0.39502258 | undirected | NA | NA |
| ## | 1823 | AT1G62500 | AT3G04840 | 0.47490275 | undirected | NA | NA |
| ## | 1824 | AT1G62500 | AT2G28790 | 0.35703154 | undirected | NA | NA |
| ## | 1825 | AT1G62500 | AT1G70600 | 0.23645891 | undirected | NA | NA |
| ## | 1826 | AT1G62500 | AT4G27090 | 0.36099129 | undirected | NA | NA |
| ## | 1827 | AT1G62500 | AT1G77510 | 0.27670629 | undirected | NA | NA |
| ## | 1828 | AT1G62500 | AT1G70830 | 0.24887811 | undirected | NA | NA |
| ## | 1829 | AT1G62500 | AT1G15690 | 0.14812059 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1830 | AT1G62500 | AT3G52590 | 0.18886566 | undirected | NA | NA |
| ## | 1831 | AT1G62500 | AT5G07090 | 0.17711746 | undirected | NA | NA |
| ## | 1832 | AT1G62500 | AT5G17920 | 0.29524519 | undirected | NA | NA |
| ## | 1833 | AT1G62500 | AT5G56030 | 0.25892426 | undirected | NA | NA |
| ## | 1834 | AT1G62500 | AT2G41840 | 0.43907358 | undirected | NA | NA |
| ## | 1835 | AT1G62500 | AT3G60245 | 0.30387232 | undirected | NA | NA |
| ## | 1836 | AT1G62500 | AT2G08665 | 0.23431700 | undirected | NA | NA |
| ## | 1837 | AT1G62500 | AT3G26520 | 0.09701656 | undirected | NA | NA |
| ## | 1838 | AT1G62500 | AT2G42840 | 0.45137437 | undirected | NA | NA |
| ## | 1839 | AT1G62500 | AT1G72370 | 0.28794510 | undirected | NA | NA |
| ## | 1840 | AT1G62500 | AT2G05520 | 0.35309562 | undirected | NA | NA |
| ## | 1841 | AT1G62500 | AT4G22513 | 0.32132276 | undirected | NA | NA |
| ## | 1842 | AT1G62500 | AT4G22530 | 0.34270413 | undirected | NA | NA |
| ## | 1843 | AT1G62500 | ATCG01210 | 0.41061362 | undirected | NA | NA |
| ## | 1844 | AT1G62500 | AT3G25520 | 0.28562629 | undirected | NA | NA |
| ## | 1845 | AT2G38540 | AT1G13710 | 0.12253190 | undirected | NA | NA |
| ## | 1846 | AT2G38540 | AT4G03210 | 0.04524990 | undirected | NA | NA |
| ## | 1847 | AT2G38540 | AT3G22121 | 0.15096458 | undirected | NA | NA |
| ## | 1848 | AT2G38540 | AT5G09220 | 0.18959150 | undirected | NA | NA |
| ## | 1849 | AT2G38540 | AT4G22517 | 0.26203189 | undirected | NA | NA |
| ## | 1850 | AT2G38540 | AT3G16640 | 0.13092181 | undirected | NA | NA |
| ## | 1851 | AT2G38540 | AT4G34870 | 0.27545990 | undirected | NA | NA |
| ## | 1852 | AT2G38540 | AT4G29030 | 0.30050972 | undirected | NA | NA |
| ## | 1853 | AT2G38540 | AT2G02100 | 0.22375931 | undirected | NA | NA |
| ## | 1854 | AT2G38540 | AT3G05727 | 0.13376394 | undirected | NA | NA |
| ## | 1855 | AT2G38540 | AT5G27850 | 0.13164440 | undirected | NA | NA |
| ## | 1856 | AT2G38540 | AT4G22495 | 0.29351017 | undirected | NA | NA |
| ## | 1857 | AT2G38540 | AT3G09200 | 0.09805688 | undirected | NA | NA |
| ## | 1858 | AT2G38540 | AT1G14320 | 0.27381509 | undirected | NA | NA |
| ## | 1859 | AT2G38540 | AT1G13930 | 0.15957709 | undirected | NA | NA |
| ## | 1860 | AT2G38540 | AT2G36530 | 0.25897387 | undirected | NA | NA |
| ## | 1861 | AT2G38540 | AT3G49910 | 0.21860712 | undirected | NA | NA |
| ## | 1862 | AT2G38540 | AT2G34480 | 0.25029512 | undirected | NA | NA |
| ## | 1863 | AT2G38540 | AT5G02960 | 0.10604094 | undirected | NA | NA |
| ## | 1864 | AT2G38540 | AT2G18020 | 0.14829436 | undirected | NA | NA |
| ## | 1865 | AT2G38540 | AT1G13440 | 0.18633172 | undirected | NA | NA |
| ## | 1866 | AT2G38540 | AT2G16600 | 0.13061292 | undirected | NA | NA |
| ## | 1867 | AT2G38540 | AT1G07920 | 0.05253685 | undirected | NA | NA |
| ## | 1868 | AT2G38540 | AT1G04410 | 0.32305902 | undirected | NA | NA |
| ## | 1869 | AT2G38540 | AT2G36830 | 0.12880047 | undirected | NA | NA |
| ## | 1870 | AT2G38540 | AT3G15353 | 0.31563436 | undirected | NA | NA |
| ## | 1871 | AT2G38540 | AT1G62480 | 0.29853178 | undirected | NA | NA |
| ## | 1872 | AT2G38540 | AT5G38940 | 0.11691712 | undirected | NA | NA |
| ## | 1873 | AT2G38540 | ATCG01180 | 0.26002442 | undirected | NA | NA |
| ## | 1874 | AT2G38540 | AT1G07930 | 0.15106146 | undirected | NA | NA |
| ## | 1875 | AT2G38540 | ATCG00950 | 0.22619526 | undirected | NA | NA |
| ## | 1876 | AT2G38540 | AT3G13920 | 0.06944783 | undirected | NA | NA |
| ## | 1877 | AT2G38540 | AT1G28290 | 0.04926235 | undirected | NA | NA |
| ## | 1878 | AT2G38540 | AT1G04270 | 0.20328639 | undirected | NA | NA |
| ## | 1879 | AT2G38540 | AT4G35100 | 0.20229263 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1880 | AT2G38540 | AT5G48480 | 0.16380013 | undirected | NA | NA |
| ## | 1881 | AT2G38540 | AT1G52400 | 0.02342021 | undirected | NA | NA |
| ## | 1882 | AT2G38540 | AT3G02470 | 0.11448806 | undirected | NA | NA |
| ## | 1883 | AT2G38540 | AT5G15200 | 0.14074998 | undirected | NA | NA |
| ## | 1884 | AT2G38540 | AT5G48485 | 0.25673118 | undirected | NA | NA |
| ## | 1885 | AT2G38540 | AT1G20620 | 0.13915337 | undirected | NA | NA |
| ## | 1886 | AT2G38540 | AT2G27720 | 0.15672040 | undirected | NA | NA |
| ## | 1887 | AT2G38540 | AT5G02870 | 0.04872681 | undirected | NA | NA |
| ## | 1888 | AT2G38540 | AT4G15000 | 0.18555811 | undirected | NA | NA |
| ## | 1889 | AT2G38540 | AT5G20290 | 0.20100179 | undirected | NA | NA |
| ## | 1890 | AT2G38540 | AT4G31700 | 0.02555620 | undirected | NA | NA |
| ## | 1891 | AT2G38540 | AT3G04400 | 0.17211001 | undirected | NA | NA |
| ## | 1892 | AT2G38540 | AT3G02230 | 0.11125431 | undirected | NA | NA |
| ## | 1893 | AT2G38540 | AT1G54410 | 0.21177849 | undirected | NA | NA |
| ## | 1894 | AT2G38540 | AT3G24830 | 0.12697623 | undirected | NA | NA |
| ## | 1895 | AT2G38540 | AT1G48920 | 0.22344422 | undirected | NA | NA |
| ## | 1896 | AT2G38540 | AT3G08770 | 0.24187804 | undirected | NA | NA |
| ## | 1897 | AT2G38540 | AT3G05590 | 0.09003045 | undirected | NA | NA |
| ## | 1898 | AT2G38540 | AT4G38680 | 0.27033143 | undirected | NA | NA |
| ## | 1899 | AT2G38540 | AT3G04840 | 0.20517451 | undirected | NA | NA |
| ## | 1900 | AT2G38540 | AT2G28790 | 0.21927691 | undirected | NA | NA |
| ## | 1901 | AT2G38540 | AT1G70600 | 0.09443851 | undirected | NA | NA |
| ## | 1902 | AT2G38540 | AT4G27090 | 0.28727293 | undirected | NA | NA |
| ## | 1903 | AT2G38540 | AT1G77510 | 0.12207336 | undirected | NA | NA |
| ## | 1904 | AT2G38540 | AT1G70830 | 0.05270600 | undirected | NA | NA |
| ## | 1905 | AT2G38540 | AT1G15690 | 0.02893166 | undirected | NA | NA |
| ## | 1906 | AT2G38540 | AT5G07090 | 0.05012582 | undirected | NA | NA |
| ## | 1907 | AT2G38540 | AT5G17920 | 0.08815143 | undirected | NA | NA |
| ## | 1908 | AT2G38540 | AT5G56030 | 0.14924136 | undirected | NA | NA |
| ## | 1909 | AT2G38540 | AT2G41840 | 0.20224516 | undirected | NA | NA |
| ## | 1910 | AT2G38540 | AT3G60245 | 0.14012587 | undirected | NA | NA |
| ## | 1911 | AT2G38540 | AT2G08665 | 0.03404394 | undirected | NA | NA |
| ## | 1912 | AT2G38540 | AT3G26520 | 0.06898981 | undirected | NA | NA |
| ## | 1913 | AT2G38540 | AT2G42840 | 0.31509519 | undirected | NA | NA |
| ## | 1914 | AT2G38540 | AT1G72370 | 0.25798369 | undirected | NA | NA |
| ## | 1915 | AT2G38540 | AT2G05520 | 0.20318187 | undirected | NA | NA |
| ## | 1916 | AT2G38540 | AT4G22513 | 0.14832689 | undirected | NA | NA |
| ## | 1917 | AT2G38540 | AT4G22530 | 0.21024265 | undirected | NA | NA |
| ## | 1918 | AT2G38540 | ATCG01210 | 0.22862130 | undirected | NA | NA |
| ## | 1919 | AT2G38540 | AT3G25520 | 0.05809233 | undirected | NA | NA |
| ## | 1920 | AT1G13710 | AT4G03210 | 0.26553890 | undirected | NA | NA |
| ## | 1921 | AT1G13710 | AT3G22121 | 0.34545987 | undirected | NA | NA |
| ## | 1922 | AT1G13710 | AT5G09220 | 0.34243650 | undirected | NA | NA |
| ## | 1923 | AT1G13710 | AT4G22517 | 0.17700036 | undirected | NA | NA |
| ## | 1924 | AT1G13710 | AT3G16640 | 0.35367830 | undirected | NA | NA |
| ## | 1925 | AT1G13710 | AT4G34870 | 0.29572088 | undirected | NA | NA |
| ## | 1926 | AT1G13710 | AT4G29030 | 0.08241961 | undirected | NA | NA |
| ## | 1927 | AT1G13710 | AT2G02100 | 0.38008078 | undirected | NA | NA |
| ## | 1928 | AT1G13710 | AT3G05727 | 0.27649828 | undirected | NA | NA |
| ## | 1929 | AT1G13710 | AT5G27850 | 0.28238139 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1930 | AT1G13710 | AT1G43170 | 0.30401195 | undirected | NA | NA |
| ## | 1931 | AT1G13710 | AT4G22495 | 0.35337707 | undirected | NA | NA |
| ## | 1932 | AT1G13710 | AT3G09200 | 0.31170091 | undirected | NA | NA |
| ## | 1933 | AT1G13710 | AT1G14320 | 0.33692132 | undirected | NA | NA |
| ## | 1934 | AT1G13710 | AT1G13930 | 0.35690943 | undirected | NA | NA |
| ## | 1935 | AT1G13710 | AT2G36530 | 0.14204003 | undirected | NA | NA |
| ## | 1936 | AT1G13710 | AT3G49910 | 0.35058942 | undirected | NA | NA |
| ## | 1937 | AT1G13710 | AT2G34480 | 0.35723165 | undirected | NA | NA |
| ## | 1938 | AT1G13710 | AT5G02960 | 0.36281730 | undirected | NA | NA |
| ## | 1939 | AT1G13710 | AT2G18020 | 0.29683230 | undirected | NA | NA |
| ## | 1940 | AT1G13710 | AT1G13440 | 0.32610840 | undirected | NA | NA |
| ## | 1941 | AT1G13710 | AT2G16600 | 0.33257678 | undirected | NA | NA |
| ## | 1942 | AT1G13710 | AT1G07920 | 0.24658918 | undirected | NA | NA |
| ## | 1943 | AT1G13710 | AT1G04410 | 0.20698276 | undirected | NA | NA |
| ## | 1944 | AT1G13710 | AT2G36830 | 0.34653474 | undirected | NA | NA |
| ## | 1945 | AT1G13710 | AT3G15353 | 0.19058158 | undirected | NA | NA |
| ## | 1946 | AT1G13710 | AT1G62480 | 0.35143839 | undirected | NA | NA |
| ## | 1947 | AT1G13710 | AT5G38940 | 0.30241621 | undirected | NA | NA |
| ## | 1948 | AT1G13710 | ATCG01180 | 0.33698962 | undirected | NA | NA |
| ## | 1949 | AT1G13710 | AT1G07930 | 0.26789578 | undirected | NA | NA |
| ## | 1950 | AT1G13710 | ATCG00950 | 0.38772339 | undirected | NA | NA |
| ## | 1951 | AT1G13710 | AT3G13920 | 0.34950704 | undirected | NA | NA |
| ## | 1952 | AT1G13710 | AT1G28290 | 0.35477780 | undirected | NA | NA |
| ## | 1953 | AT1G13710 | AT1G04270 | 0.36315892 | undirected | NA | NA |
| ## | 1954 | AT1G13710 | AT4G35100 | 0.33718504 | undirected | NA | NA |
| ## | 1955 | AT1G13710 | AT5G48480 | 0.37015528 | undirected | NA | NA |
| ## | 1956 | AT1G13710 | AT1G52400 | 0.32566684 | undirected | NA | NA |
| ## | 1957 | AT1G13710 | AT3G02470 | 0.16716361 | undirected | NA | NA |
| ## | 1958 | AT1G13710 | AT5G15200 | 0.35590871 | undirected | NA | NA |
| ## | 1959 | AT1G13710 | AT5G48485 | 0.37306837 | undirected | NA | NA |
| ## | 1960 | AT1G13710 | AT1G20620 | 0.35329592 | undirected | NA | NA |
| ## | 1961 | AT1G13710 | AT2G27720 | 0.40551031 | undirected | NA | NA |
| ## | 1962 | AT1G13710 | AT5G02870 | 0.32622671 | undirected | NA | NA |
| ## | 1963 | AT1G13710 | AT4G15000 | 0.32856834 | undirected | NA | NA |
| ## | 1964 | AT1G13710 | AT5G20290 | 0.12050509 | undirected | NA | NA |
| ## | 1965 | AT1G13710 | AT4G31700 | 0.22384543 | undirected | NA | NA |
| ## | 1966 | AT1G13710 | AT3G04400 | 0.10665357 | undirected | NA | NA |
| ## | 1967 | AT1G13710 | AT3G02230 | 0.27826134 | undirected | NA | NA |
| ## | 1968 | AT1G13710 | AT1G54410 | 0.35759972 | undirected | NA | NA |
| ## | 1969 | AT1G13710 | AT3G24830 | 0.34336682 | undirected | NA | NA |
| ## | 1970 | AT1G13710 | AT1G48920 | 0.10128339 | undirected | NA | NA |
| ## | 1971 | AT1G13710 | AT3G08770 | 0.36879237 | undirected | NA | NA |
| ## | 1972 | AT1G13710 | AT3G05590 | 0.34044642 | undirected | NA | NA |
| ## | 1973 | AT1G13710 | AT4G38680 | 0.36871202 | undirected | NA | NA |
| ## | 1974 | AT1G13710 | AT3G04840 | 0.33773224 | undirected | NA | NA |
| ## | 1975 | AT1G13710 | AT2G28790 | 0.18588799 | undirected | NA | NA |
| ## | 1976 | AT1G13710 | AT1G70600 | 0.33978376 | undirected | NA | NA |
| ## | 1977 | AT1G13710 | AT4G27090 | 0.35519900 | undirected | NA | NA |
| ## | 1978 | AT1G13710 | AT1G77510 | 0.31151124 | undirected | NA | NA |
| ## | 1979 | AT1G13710 | AT1G70830 | 0.16573547 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 1980 | AT1G13710 | AT1G15690 | 0.29268751 | undirected | NA | NA |
| ## | 1981 | AT1G13710 | AT3G52590 | 0.17840826 | undirected | NA | NA |
| ## | 1982 | AT1G13710 | AT5G07090 | 0.29761389 | undirected | NA | NA |
| ## | 1983 | AT1G13710 | AT5G17920 | 0.15225767 | undirected | NA | NA |
| ## | 1984 | AT1G13710 | AT5G56030 | 0.27130449 | undirected | NA | NA |
| ## | 1985 | AT1G13710 | AT2G41840 | 0.36709090 | undirected | NA | NA |
| ## | 1986 | AT1G13710 | AT3G60245 | 0.32346793 | undirected | NA | NA |
| ## | 1987 | AT1G13710 | AT2G08665 | 0.34884538 | undirected | NA | NA |
| ## | 1988 | AT1G13710 | AT3G26520 | 0.03468882 | undirected | NA | NA |
| ## | 1989 | AT1G13710 | AT2G42840 | 0.34988248 | undirected | NA | NA |
| ## | 1990 | AT1G13710 | AT1G72370 | 0.16913446 | undirected | NA | NA |
| ## | 1991 | AT1G13710 | AT2G05520 | 0.32918270 | undirected | NA | NA |
| ## | 1992 | AT1G13710 | AT4G22513 | 0.30178446 | undirected | NA | NA |
| ## | 1993 | AT1G13710 | AT4G22530 | 0.37623496 | undirected | NA | NA |
| ## | 1994 | AT1G13710 | ATCG01210 | 0.37989230 | undirected | NA | NA |
| ## | 1995 | AT1G13710 | AT3G25520 | 0.37208645 | undirected | NA | NA |
| ## | 1996 | AT4G03210 | AT3G22121 | 0.21045377 | undirected | NA | NA |
| ## | 1997 | AT4G03210 | AT5G09220 | 0.09985238 | undirected | NA | NA |
| ## | 1998 | AT4G03210 | AT4G22517 | 0.04162664 | undirected | NA | NA |
| ## | 1999 | AT4G03210 | AT3G16640 | 0.22734352 | undirected | NA | NA |
| ## | 2000 | AT4G03210 | AT4G34870 | 0.10874335 | undirected | NA | NA |
| ## | 2001 | AT4G03210 | AT4G29030 | 0.03919869 | undirected | NA | NA |
| ## | 2002 | AT4G03210 | AT2G02100 | 0.16746475 | undirected | NA | NA |
| ## | 2003 | AT4G03210 | AT3G05727 | 0.32377656 | undirected | NA | NA |
| ## | 2004 | AT4G03210 | AT5G27850 | 0.25819464 | undirected | NA | NA |
| ## | 2005 | AT4G03210 | AT1G43170 | 0.23977696 | undirected | NA | NA |
| ## | 2006 | AT4G03210 | AT4G22495 | 0.12313026 | undirected | NA | NA |
| ## | 2007 | AT4G03210 | AT3G09200 | 0.19348566 | undirected | NA | NA |
| ## | 2008 | AT4G03210 | AT1G14320 | 0.09074054 | undirected | NA | NA |
| ## | 2009 | AT4G03210 | AT1G13930 | 0.14398287 | undirected | NA | NA |
| ## | 2010 | AT4G03210 | AT2G36530 | 0.04363209 | undirected | NA | NA |
| ## | 2011 | AT4G03210 | AT3G49910 | 0.08143629 | undirected | NA | NA |
| ## | 2012 | AT4G03210 | AT2G34480 | 0.18814350 | undirected | NA | NA |
| ## | 2013 | AT4G03210 | AT5G02960 | 0.20807366 | undirected | NA | NA |
| ## | 2014 | AT4G03210 | AT2G18020 | 0.15154244 | undirected | NA | NA |
| ## | 2015 | AT4G03210 | AT1G13440 | 0.25911251 | undirected | NA | NA |
| ## | 2016 | AT4G03210 | AT2G16600 | 0.19067561 | undirected | NA | NA |
| ## | 2017 | AT4G03210 | AT1G07920 | 0.23859960 | undirected | NA | NA |
| ## | 2018 | AT4G03210 | AT1G04410 | 0.10119294 | undirected | NA | NA |
| ## | 2019 | AT4G03210 | AT2G36830 | 0.20060804 | undirected | NA | NA |
| ## | 2020 | AT4G03210 | AT3G15353 | 0.06220822 | undirected | NA | NA |
| ## | 2021 | AT4G03210 | AT1G62480 | 0.11367036 | undirected | NA | NA |
| ## | 2022 | AT4G03210 | AT5G38940 | 0.30432566 | undirected | NA | NA |
| ## | 2023 | AT4G03210 | ATCG01180 | 0.15815765 | undirected | NA | NA |
| ## | 2024 | AT4G03210 | AT1G07930 | 0.19488973 | undirected | NA | NA |
| ## | 2025 | AT4G03210 | ATCG00950 | 0.16764964 | undirected | NA | NA |
| ## | 2026 | AT4G03210 | AT3G13920 | 0.23875590 | undirected | NA | NA |
| ## | 2027 | AT4G03210 | AT1G28290 | 0.18315845 | undirected | NA | NA |
| ## | 2028 | AT4G03210 | AT1G04270 | 0.18399480 | undirected | NA | NA |
| ## | 2029 | AT4G03210 | AT4G35100 | 0.23613217 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2030 | AT4G03210 | AT5G48480 | 0.18760919 | undirected | NA | NA |
| ## | 2031 | AT4G03210 | AT1G52400 | 0.18481221 | undirected | NA | NA |
| ## | 2032 | AT4G03210 | AT3G02470 | 0.03096587 | undirected | NA | NA |
| ## | 2033 | AT4G03210 | AT5G15200 | 0.33156536 | undirected | NA | NA |
| ## | 2034 | AT4G03210 | AT5G48485 | 0.11782711 | undirected | NA | NA |
| ## | 2035 | AT4G03210 | AT1G20620 | 0.20735092 | undirected | NA | NA |
| ## | 2036 | AT4G03210 | AT2G27720 | 0.14581669 | undirected | NA | NA |
| ## | 2037 | AT4G03210 | AT5G02870 | 0.22198690 | undirected | NA | NA |
| ## | 2038 | AT4G03210 | AT4G15000 | 0.27858324 | undirected | NA | NA |
| ## | 2039 | AT4G03210 | AT5G20290 | 0.08158493 | undirected | NA | NA |
| ## | 2040 | AT4G03210 | AT4G31700 | 0.24486147 | undirected | NA | NA |
| ## | 2041 | AT4G03210 | AT3G04400 | 0.03800662 | undirected | NA | NA |
| ## | 2042 | AT4G03210 | AT3G02230 | 0.20038992 | undirected | NA | NA |
| ## | 2043 | AT4G03210 | AT1G54410 | 0.22952568 | undirected | NA | NA |
| ## | 2044 | AT4G03210 | AT3G24830 | 0.27195357 | undirected | NA | NA |
| ## | 2045 | AT4G03210 | AT1G48920 | 0.03534165 | undirected | NA | NA |
| ## | 2046 | AT4G03210 | AT3G08770 | 0.16955839 | undirected | NA | NA |
| ## | 2047 | AT4G03210 | AT3G05590 | 0.36979751 | undirected | NA | NA |
| ## | 2048 | AT4G03210 | AT4G38680 | 0.14956006 | undirected | NA | NA |
| ## | 2049 | AT4G03210 | AT3G04840 | 0.08372202 | undirected | NA | NA |
| ## | 2050 | AT4G03210 | AT2G28790 | 0.04576588 | undirected | NA | NA |
| ## | 2051 | AT4G03210 | AT1G70600 | 0.21471383 | undirected | NA | NA |
| ## | 2052 | AT4G03210 | AT4G27090 | 0.15694417 | undirected | NA | NA |
| ## | 2053 | AT4G03210 | AT1G77510 | 0.17827131 | undirected | NA | NA |
| ## | 2054 | AT4G03210 | AT1G70830 | 0.02966914 | undirected | NA | NA |
| ## | 2055 | AT4G03210 | AT1G15690 | 0.20314484 | undirected | NA | NA |
| ## | 2056 | AT4G03210 | AT3G52590 | 0.03498960 | undirected | NA | NA |
| ## | 2057 | AT4G03210 | AT5G07090 | 0.25266515 | undirected | NA | NA |
| ## | 2058 | AT4G03210 | AT5G56030 | 0.22032997 | undirected | NA | NA |
| ## | 2059 | AT4G03210 | AT2G41840 | 0.15173128 | undirected | NA | NA |
| ## | 2060 | AT4G03210 | AT3G60245 | 0.19506401 | undirected | NA | NA |
| ## | 2061 | AT4G03210 | AT2G08665 | 0.23386920 | undirected | NA | NA |
| ## | 2062 | AT4G03210 | AT2G42840 | 0.10936755 | undirected | NA | NA |
| ## | 2063 | AT4G03210 | AT1G72370 | 0.08135459 | undirected | NA | NA |
| ## | 2064 | AT4G03210 | AT2G05520 | 0.22720022 | undirected | NA | NA |
| ## | 2065 | AT4G03210 | AT4G22513 | 0.23295079 | undirected | NA | NA |
| ## | 2066 | AT4G03210 | AT4G22530 | 0.16930444 | undirected | NA | NA |
| ## | 2067 | AT4G03210 | ATCG01210 | 0.11609320 | undirected | NA | NA |
| ## | 2068 | AT4G03210 | AT3G25520 | 0.21427838 | undirected | NA | NA |
| ## | 2069 | AT3G22121 | AT5G09220 | 0.33742724 | undirected | NA | NA |
| ## | 2070 | AT3G22121 | AT4G22517 | 0.22260095 | undirected | NA | NA |
| ## | 2071 | AT3G22121 | AT3G16640 | 0.30469710 | undirected | NA | NA |
| ## | 2072 | AT3G22121 | AT4G34870 | 0.33111300 | undirected | NA | NA |
| ## | 2073 | AT3G22121 | AT4G29030 | 0.10089085 | undirected | NA | NA |
| ## | 2074 | AT3G22121 | AT2G02100 | 0.37962107 | undirected | NA | NA |
| ## | 2075 | AT3G22121 | AT3G05727 | 0.26515392 | undirected | NA | NA |
| ## | 2076 | AT3G22121 | AT5G27850 | 0.30082218 | undirected | NA | NA |
| ## | 2077 | AT3G22121 | AT1G43170 | 0.20018762 | undirected | NA | NA |
| ## | 2078 | AT3G22121 | AT4G22495 | 0.38003118 | undirected | NA | NA |
| ## | 2079 | AT3G22121 | AT3G09200 | 0.27309840 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2080 | AT3G22121 | AT1G14320 | 0.37592402 | undirected | NA | NA |
| ## | 2081 | AT3G22121 | AT1G13930 | 0.37576302 | undirected | NA | NA |
| ## | 2082 | AT3G22121 | AT2G36530 | 0.16740847 | undirected | NA | NA |
| ## | 2083 | AT3G22121 | AT3G49910 | 0.38244282 | undirected | NA | NA |
| ## | 2084 | AT3G22121 | AT2G34480 | 0.33683554 | undirected | NA | NA |
| ## | 2085 | AT3G22121 | AT5G02960 | 0.30883211 | undirected | NA | NA |
| ## | 2086 | AT3G22121 | AT2G18020 | 0.29878284 | undirected | NA | NA |
| ## | 2087 | AT3G22121 | AT1G13440 | 0.29977657 | undirected | NA | NA |
| ## | 2088 | AT3G22121 | AT2G16600 | 0.32605647 | undirected | NA | NA |
| ## | 2089 | AT3G22121 | AT1G07920 | 0.20338348 | undirected | NA | NA |
| ## | 2090 | AT3G22121 | AT1G04410 | 0.22712223 | undirected | NA | NA |
| ## | 2091 | AT3G22121 | AT2G36830 | 0.32362336 | undirected | NA | NA |
| ## | 2092 | AT3G22121 | AT3G15353 | 0.21738379 | undirected | NA | NA |
| ## | 2093 | AT3G22121 | AT1G62480 | 0.38577844 | undirected | NA | NA |
| ## | 2094 | AT3G22121 | AT5G38940 | 0.28825005 | undirected | NA | NA |
| ## | 2095 | AT3G22121 | ATCG01180 | 0.34089713 | undirected | NA | NA |
| ## | 2096 | AT3G22121 | AT1G07930 | 0.26135000 | undirected | NA | NA |
| ## | 2097 | AT3G22121 | ATCG00950 | 0.37241449 | undirected | NA | NA |
| ## | 2098 | AT3G22121 | AT3G13920 | 0.28394066 | undirected | NA | NA |
| ## | 2099 | AT3G22121 | AT1G28290 | 0.31820978 | undirected | NA | NA |
| ## | 2100 | AT3G22121 | AT1G04270 | 0.35109894 | undirected | NA | NA |
| ## | 2101 | AT3G22121 | AT4G35100 | 0.34493950 | undirected | NA | NA |
| ## | 2102 | AT3G22121 | AT5G48480 | 0.36004326 | undirected | NA | NA |
| ## | 2103 | AT3G22121 | AT1G52400 | 0.24699121 | undirected | NA | NA |
| ## | 2104 | AT3G22121 | AT3G02470 | 0.20373556 | undirected | NA | NA |
| ## | 2105 | AT3G22121 | AT5G15200 | 0.34986724 | undirected | NA | NA |
| ## | 2106 | AT3G22121 | AT5G48485 | 0.39107923 | undirected | NA | NA |
| ## | 2107 | AT3G22121 | AT1G20620 | 0.32969539 | undirected | NA | NA |
| ## | 2108 | AT3G22121 | AT2G27720 | 0.38710631 | undirected | NA | NA |
| ## | 2109 | AT3G22121 | AT5G02870 | 0.25700199 | undirected | NA | NA |
| ## | 2110 | AT3G22121 | AT4G15000 | 0.31270727 | undirected | NA | NA |
| ## | 2111 | AT3G22121 | AT5G20290 | 0.13953852 | undirected | NA | NA |
| ## | 2112 | AT3G22121 | AT4G31700 | 0.17466916 | undirected | NA | NA |
| ## | 2113 | AT3G22121 | AT3G04400 | 0.13787142 | undirected | NA | NA |
| ## | 2114 | AT3G22121 | AT3G02230 | 0.26549046 | undirected | NA | NA |
| ## | 2115 | AT3G22121 | AT1G54410 | 0.34043267 | undirected | NA | NA |
| ## | 2116 | AT3G22121 | AT3G24830 | 0.35464981 | undirected | NA | NA |
| ## | 2117 | AT3G22121 | AT1G48920 | 0.12663546 | undirected | NA | NA |
| ## | 2118 | AT3G22121 | AT3G08770 | 0.35017423 | undirected | NA | NA |
| ## | 2119 | AT3G22121 | AT3G05590 | 0.32597140 | undirected | NA | NA |
| ## | 2120 | AT3G22121 | AT4G38680 | 0.37555518 | undirected | NA | NA |
| ## | 2121 | AT3G22121 | AT3G04840 | 0.37384360 | undirected | NA | NA |
| ## | 2122 | AT3G22121 | AT2G28790 | 0.22489439 | undirected | NA | NA |
| ## | 2123 | AT3G22121 | AT1G70600 | 0.29373287 | undirected | NA | NA |
| ## | 2124 | AT3G22121 | AT4G27090 | 0.35922610 | undirected | NA | NA |
| ## | 2125 | AT3G22121 | AT1G77510 | 0.31654225 | undirected | NA | NA |
| ## | 2126 | AT3G22121 | AT1G70830 | 0.20259667 | undirected | NA | NA |
| ## | 2127 | AT3G22121 | AT1G15690 | 0.23140543 | undirected | NA | NA |
| ## | 2128 | AT3G22121 | AT3G52590 | 0.19378428 | undirected | NA | NA |
| ## | 2129 | AT3G22121 | AT5G07090 | 0.24027108 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2130 | AT3G22121 | AT5G17920 | 0.20901561 | undirected | NA | NA |
| ## | 2131 | AT3G22121 | AT5G56030 | 0.26865456 | undirected | NA | NA |
| ## | 2132 | AT3G22121 | AT2G41840 | 0.37285590 | undirected | NA | NA |
| ## | 2133 | AT3G22121 | AT3G60245 | 0.32063311 | undirected | NA | NA |
| ## | 2134 | AT3G22121 | AT2G08665 | 0.29008027 | undirected | NA | NA |
| ## | 2135 | AT3G22121 | AT3G26520 | 0.04303379 | undirected | NA | NA |
| ## | 2136 | AT3G22121 | AT2G42840 | 0.37625283 | undirected | NA | NA |
| ## | 2137 | AT3G22121 | AT1G72370 | 0.18452612 | undirected | NA | NA |
| ## | 2138 | AT3G22121 | AT2G05520 | 0.31849290 | undirected | NA | NA |
| ## | 2139 | AT3G22121 | AT4G22513 | 0.31164822 | undirected | NA | NA |
| ## | 2140 | AT3G22121 | AT4G22530 | 0.35400178 | undirected | NA | NA |
| ## | 2141 | AT3G22121 | ATCG01210 | 0.38333006 | undirected | NA | NA |
| ## | 2142 | AT3G22121 | AT3G25520 | 0.30576642 | undirected | NA | NA |
| ## | 2143 | AT5G09220 | AT4G22517 | 0.22834835 | undirected | NA | NA |
| ## | 2144 | AT5G09220 | AT3G16640 | 0.28917141 | undirected | NA | NA |
| ## | 2145 | AT5G09220 | AT4G34870 | 0.21697540 | undirected | NA | NA |
| ## | 2146 | AT5G09220 | AT4G29030 | 0.14270769 | undirected | NA | NA |
| ## | 2147 | AT5G09220 | AT2G02100 | 0.44846392 | undirected | NA | NA |
| ## | 2148 | AT5G09220 | AT3G05727 | 0.20380657 | undirected | NA | NA |
| ## | 2149 | AT5G09220 | AT5G27850 | 0.21697234 | undirected | NA | NA |
| ## | 2150 | AT5G09220 | AT1G43170 | 0.08648019 | undirected | NA | NA |
| ## | 2151 | AT5G09220 | AT4G22495 | 0.31844499 | undirected | NA | NA |
| ## | 2152 | AT5G09220 | AT3G09200 | 0.16881481 | undirected | NA | NA |
| ## | 2153 | AT5G09220 | AT1G14320 | 0.29887568 | undirected | NA | NA |
| ## | 2154 | AT5G09220 | AT1G13930 | 0.27635486 | undirected | NA | NA |
| ## | 2155 | AT5G09220 | AT2G36530 | 0.22734304 | undirected | NA | NA |
| ## | 2156 | AT5G09220 | AT3G49910 | 0.34929512 | undirected | NA | NA |
| ## | 2157 | AT5G09220 | AT2G34480 | 0.32645442 | undirected | NA | NA |
| ## | 2158 | AT5G09220 | AT5G02960 | 0.26415478 | undirected | NA | NA |
| ## | 2159 | AT5G09220 | AT2G18020 | 0.20538099 | undirected | NA | NA |
| ## | 2160 | AT5G09220 | AT1G13440 | 0.27520352 | undirected | NA | NA |
| ## | 2161 | AT5G09220 | AT2G16600 | 0.30142605 | undirected | NA | NA |
| ## | 2162 | AT5G09220 | AT1G07920 | 0.08880648 | undirected | NA | NA |
| ## | 2163 | AT5G09220 | AT1G04410 | 0.16648154 | undirected | NA | NA |
| ## | 2164 | AT5G09220 | AT2G36830 | 0.22593238 | undirected | NA | NA |
| ## | 2165 | AT5G09220 | AT3G15353 | 0.24104566 | undirected | NA | NA |
| ## | 2166 | AT5G09220 | AT1G62480 | 0.31716699 | undirected | NA | NA |
| ## | 2167 | AT5G09220 | AT5G38940 | 0.23767682 | undirected | NA | NA |
| ## | 2168 | AT5G09220 | ATCG01180 | 0.28590912 | undirected | NA | NA |
| ## | 2169 | AT5G09220 | AT1G07930 | 0.12541937 | undirected | NA | NA |
| ## | 2170 | AT5G09220 | ATCG00950 | 0.42982651 | undirected | NA | NA |
| ## | 2171 | AT5G09220 | AT3G13920 | 0.22137694 | undirected | NA | NA |
| ## | 2172 | AT5G09220 | AT1G28290 | 0.13845823 | undirected | NA | NA |
| ## | 2173 | AT5G09220 | AT1G04270 | 0.30214638 | undirected | NA | NA |
| ## | 2174 | AT5G09220 | AT4G35100 | 0.35390605 | undirected | NA | NA |
| ## | 2175 | AT5G09220 | AT5G48480 | 0.26083527 | undirected | NA | NA |
| ## | 2176 | AT5G09220 | AT1G52400 | 0.12864382 | undirected | NA | NA |
| ## | 2177 | AT5G09220 | AT3G02470 | 0.18483398 | undirected | NA | NA |
| ## | 2178 | AT5G09220 | AT5G15200 | 0.28932937 | undirected | NA | NA |
| ## | 2179 | AT5G09220 | AT5G48485 | 0.37764424 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2180 | AT5G09220 | AT1G20620 | 0.20840546 | undirected | NA | NA |
| ## | 2181 | AT5G09220 | AT2G27720 | 0.33998655 | undirected | NA | NA |
| ## | 2182 | AT5G09220 | AT5G02870 | 0.15700504 | undirected | NA | NA |
| ## | 2183 | AT5G09220 | AT4G15000 | 0.31249078 | undirected | NA | NA |
| ## | 2184 | AT5G09220 | AT5G20290 | 0.08046157 | undirected | NA | NA |
| ## | 2185 | AT5G09220 | AT4G31700 | 0.04053134 | undirected | NA | NA |
| ## | 2186 | AT5G09220 | AT3G04400 | 0.13691611 | undirected | NA | NA |
| ## | 2187 | AT5G09220 | AT3G02230 | 0.19317677 | undirected | NA | NA |
| ## | 2188 | AT5G09220 | AT1G54410 | 0.36138889 | undirected | NA | NA |
| ## | 2189 | AT5G09220 | AT3G24830 | 0.28567907 | undirected | NA | NA |
| ## | 2190 | AT5G09220 | AT1G48920 | 0.16284818 | undirected | NA | NA |
| ## | 2191 | AT5G09220 | AT3G08770 | 0.28298252 | undirected | NA | NA |
| ## | 2192 | AT5G09220 | AT3G05590 | 0.20278260 | undirected | NA | NA |
| ## | 2193 | AT5G09220 | AT4G38680 | 0.35432201 | undirected | NA | NA |
| ## | 2194 | AT5G09220 | AT3G04840 | 0.24940798 | undirected | NA | NA |
| ## | 2195 | AT5G09220 | AT2G28790 | 0.22922657 | undirected | NA | NA |
| ## | 2196 | AT5G09220 | AT1G70600 | 0.19855722 | undirected | NA | NA |
| ## | 2197 | AT5G09220 | AT4G27090 | 0.35022475 | undirected | NA | NA |
| ## | 2198 | AT5G09220 | AT1G77510 | 0.16868612 | undirected | NA | NA |
| ## | 2199 | AT5G09220 | AT1G70830 | 0.12855230 | undirected | NA | NA |
| ## | 2200 | AT5G09220 | AT1G15690 | 0.08409889 | undirected | NA | NA |
| ## | 2201 | AT5G09220 | AT3G52590 | 0.10087043 | undirected | NA | NA |
| ## | 2202 | AT5G09220 | AT5G07090 | 0.15463900 | undirected | NA | NA |
| ## | 2203 | AT5G09220 | AT5G17920 | 0.14604534 | undirected | NA | NA |
| ## | 2204 | AT5G09220 | AT5G56030 | 0.21168365 | undirected | NA | NA |
| ## | 2205 | AT5G09220 | AT2G41840 | 0.43566104 | undirected | NA | NA |
| ## | 2206 | AT5G09220 | AT3G60245 | 0.17050031 | undirected | NA | NA |
| ## | 2207 | AT5G09220 | AT2G08665 | 0.08275868 | undirected | NA | NA |
| ## | 2208 | AT5G09220 | AT3G26520 | 0.11700819 | undirected | NA | NA |
| ## | 2209 | AT5G09220 | AT2G42840 | 0.32905515 | undirected | NA | NA |
| ## | 2210 | AT5G09220 | AT1G72370 | 0.19550388 | undirected | NA | NA |
| ## | 2211 | AT5G09220 | AT2G05520 | 0.33256633 | undirected | NA | NA |
| ## | 2212 | AT5G09220 | AT4G22513 | 0.27224083 | undirected | NA | NA |
| ## | 2213 | AT5G09220 | AT4G22530 | 0.37664497 | undirected | NA | NA |
| ## | 2214 | AT5G09220 | ATCG01210 | 0.42472917 | undirected | NA | NA |
| ## | 2215 | AT5G09220 | AT3G25520 | 0.13080288 | undirected | NA | NA |
| ## | 2216 | AT4G22517 | AT3G16640 | 0.15080505 | undirected | NA | NA |
| ## | 2217 | AT4G22517 | AT4G34870 | 0.27901630 | undirected | NA | NA |
| ## | 2218 | AT4G22517 | AT4G29030 | 0.21690768 | undirected | NA | NA |
| ## | 2219 | AT4G22517 | AT2G02100 | 0.32663594 | undirected | NA | NA |
| ## | 2220 | AT4G22517 | AT3G05727 | 0.12175186 | undirected | NA | NA |
| ## | 2221 | AT4G22517 | AT5G27850 | 0.14481779 | undirected | NA | NA |
| ## | 2222 | AT4G22517 | AT4G22495 | 0.35292242 | undirected | NA | NA |
| ## | 2223 | AT4G22517 | AT3G09200 | 0.09311309 | undirected | NA | NA |
| ## | 2224 | AT4G22517 | AT1G14320 | 0.35586867 | undirected | NA | NA |
| ## | 2225 | AT4G22517 | AT1G13930 | 0.23320099 | undirected | NA | NA |
| ## | 2226 | AT4G22517 | AT2G36530 | 0.27654922 | undirected | NA | NA |
| ## | 2227 | AT4G22517 | AT3G49910 | 0.34383528 | undirected | NA | NA |
| ## | 2228 | AT4G22517 | AT2G34480 | 0.26092611 | undirected | NA | NA |
| ## | 2229 | AT4G22517 | AT5G02960 | 0.13477160 | undirected | NA | NA |

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|----|------|-----------|-----------|-------------|------------|----|----|
| ## | 2230 | AT4G22517 | AT2G18020 | 0.15534505 | undirected | NA | NA |
| ## | 2231 | AT4G22517 | AT1G13440 | 0.18914511 | undirected | NA | NA |
| ## | 2232 | AT4G22517 | AT2G16600 | 0.18090685 | undirected | NA | NA |
| ## | 2233 | AT4G22517 | AT1G07920 | 0.04334711 | undirected | NA | NA |
| ## | 2234 | AT4G22517 | AT1G04410 | 0.23182875 | undirected | NA | NA |
| ## | 2235 | AT4G22517 | AT2G36830 | 0.16081203 | undirected | NA | NA |
| ## | 2236 | AT4G22517 | AT3G15353 | 0.26785507 | undirected | NA | NA |
| ## | 2237 | AT4G22517 | AT1G62480 | 0.36814826 | undirected | NA | NA |
| ## | 2238 | AT4G22517 | AT5G38940 | 0.11949438 | undirected | NA | NA |
| ## | 2239 | AT4G22517 | ATCG01180 | 0.26966231 | undirected | NA | NA |
| ## | 2240 | AT4G22517 | AT1G07930 | 0.12801952 | undirected | NA | NA |
| ## | 2241 | AT4G22517 | ATCG00950 | 0.30445836 | undirected | NA | NA |
| ## | 2242 | AT4G22517 | AT3G13920 | 0.09075524 | undirected | NA | NA |
| ## | 2243 | AT4G22517 | AT1G28290 | 0.07541613 | undirected | NA | NA |
| ## | 2244 | AT4G22517 | AT1G04270 | 0.23942108 | undirected | NA | NA |
| ## | 2245 | AT4G22517 | AT4G35100 | 0.25425289 | undirected | NA | NA |
| ## | 2246 | AT4G22517 | AT5G48480 | 0.20741741 | undirected | NA | NA |
| ## | 2247 | AT4G22517 | AT1G52400 | 0.03546333 | undirected | NA | NA |
| ## | 2248 | AT4G22517 | AT3G02470 | 0.16396335 | undirected | NA | NA |
| ## | 2249 | AT4G22517 | AT5G15200 | 0.16133422 | undirected | NA | NA |
| ## | 2250 | AT4G22517 | AT5G48485 | 0.35029352 | undirected | NA | NA |
| ## | 2251 | AT4G22517 | AT1G20620 | 0.16082118 | undirected | NA | NA |
| ## | 2252 | AT4G22517 | AT2G27720 | 0.24147019 | undirected | NA | NA |
| ## | 2253 | AT4G22517 | AT5G02870 | 0.05785205 | undirected | NA | NA |
| ## | 2254 | AT4G22517 | AT4G15000 | 0.204444890 | undirected | NA | NA |
| ## | 2255 | AT4G22517 | AT5G20290 | 0.11096057 | undirected | NA | NA |
| ## | 2256 | AT4G22517 | AT4G31700 | 0.02054366 | undirected | NA | NA |
| ## | 2257 | AT4G22517 | AT3G04400 | 0.21397801 | undirected | NA | NA |
| ## | 2258 | AT4G22517 | AT3G02230 | 0.10895112 | undirected | NA | NA |
| ## | 2259 | AT4G22517 | AT1G54410 | 0.25295288 | undirected | NA | NA |
| ## | 2260 | AT4G22517 | AT3G24830 | 0.16359637 | undirected | NA | NA |
| ## | 2261 | AT4G22517 | AT1G48920 | 0.26381827 | undirected | NA | NA |
| ## | 2262 | AT4G22517 | AT3G08770 | 0.25057613 | undirected | NA | NA |
| ## | 2263 | AT4G22517 | AT3G05590 | 0.09596841 | undirected | NA | NA |
| ## | 2264 | AT4G22517 | AT4G38680 | 0.32048357 | undirected | NA | NA |
| ## | 2265 | AT4G22517 | AT3G04840 | 0.29241300 | undirected | NA | NA |
| ## | 2266 | AT4G22517 | AT2G28790 | 0.23432340 | undirected | NA | NA |
| ## | 2267 | AT4G22517 | AT1G70600 | 0.10639778 | undirected | NA | NA |
| ## | 2268 | AT4G22517 | AT4G27090 | 0.31703696 | undirected | NA | NA |
| ## | 2269 | AT4G22517 | AT1G77510 | 0.14334836 | undirected | NA | NA |
| ## | 2270 | AT4G22517 | AT1G70830 | 0.09044120 | undirected | NA | NA |
| ## | 2271 | AT4G22517 | AT1G15690 | 0.02863178 | undirected | NA | NA |
| ## | 2272 | AT4G22517 | AT3G52590 | 0.03623267 | undirected | NA | NA |
| ## | 2273 | AT4G22517 | AT5G07090 | 0.05407989 | undirected | NA | NA |
| ## | 2274 | AT4G22517 | AT5G17920 | 0.15408320 | undirected | NA | NA |
| ## | 2275 | AT4G22517 | AT5G56030 | 0.14589514 | undirected | NA | NA |
| ## | 2276 | AT4G22517 | AT2G41840 | 0.31219406 | undirected | NA | NA |
| ## | 2277 | AT4G22517 | AT3G60245 | 0.15530271 | undirected | NA | NA |
| ## | 2278 | AT4G22517 | AT2G08665 | 0.04335523 | undirected | NA | NA |
| ## | 2279 | AT4G22517 | AT3G26520 | 0.11791392 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2280 | AT4G22517 | AT2G42840 | 0.37902268 | undirected | NA | NA |
| ## | 2281 | AT4G22517 | AT1G72370 | 0.22432678 | undirected | NA | NA |
| ## | 2282 | AT4G22517 | AT2G05520 | 0.22703468 | undirected | NA | NA |
| ## | 2283 | AT4G22517 | AT4G22513 | 0.17210991 | undirected | NA | NA |
| ## | 2284 | AT4G22517 | AT4G22530 | 0.25763783 | undirected | NA | NA |
| ## | 2285 | AT4G22517 | ATCG01210 | 0.33450955 | undirected | NA | NA |
| ## | 2286 | AT4G22517 | AT3G25520 | 0.07698497 | undirected | NA | NA |
| ## | 2287 | AT3G16640 | AT4G34870 | 0.25254673 | undirected | NA | NA |
| ## | 2288 | AT3G16640 | AT4G29030 | 0.09951860 | undirected | NA | NA |
| ## | 2289 | AT3G16640 | AT2G02100 | 0.30513796 | undirected | NA | NA |
| ## | 2290 | AT3G16640 | AT3G05727 | 0.30995931 | undirected | NA | NA |
| ## | 2291 | AT3G16640 | AT5G27850 | 0.28195639 | undirected | NA | NA |
| ## | 2292 | AT3G16640 | AT1G43170 | 0.32230432 | undirected | NA | NA |
| ## | 2293 | AT3G16640 | AT4G22495 | 0.28328440 | undirected | NA | NA |
| ## | 2294 | AT3G16640 | AT3G09200 | 0.28531279 | undirected | NA | NA |
| ## | 2295 | AT3G16640 | AT1G14320 | 0.25397957 | undirected | NA | NA |
| ## | 2296 | AT3G16640 | AT1G13930 | 0.25726252 | undirected | NA | NA |
| ## | 2297 | AT3G16640 | AT2G36530 | 0.14279230 | undirected | NA | NA |
| ## | 2298 | AT3G16640 | AT3G49910 | 0.24386657 | undirected | NA | NA |
| ## | 2299 | AT3G16640 | AT2G34480 | 0.30980867 | undirected | NA | NA |
| ## | 2300 | AT3G16640 | AT5G02960 | 0.30116761 | undirected | NA | NA |
| ## | 2301 | AT3G16640 | AT2G18020 | 0.24266727 | undirected | NA | NA |
| ## | 2302 | AT3G16640 | AT1G13440 | 0.30136977 | undirected | NA | NA |
| ## | 2303 | AT3G16640 | AT2G16600 | 0.28352927 | undirected | NA | NA |
| ## | 2304 | AT3G16640 | AT1G07920 | 0.20944052 | undirected | NA | NA |
| ## | 2305 | AT3G16640 | AT1G04410 | 0.21452069 | undirected | NA | NA |
| ## | 2306 | AT3G16640 | AT2G36830 | 0.27906510 | undirected | NA | NA |
| ## | 2307 | AT3G16640 | AT3G15353 | 0.18723849 | undirected | NA | NA |
| ## | 2308 | AT3G16640 | AT1G62480 | 0.27410286 | undirected | NA | NA |
| ## | 2309 | AT3G16640 | AT5G38940 | 0.33138719 | undirected | NA | NA |
| ## | 2310 | AT3G16640 | ATCG01180 | 0.29372687 | undirected | NA | NA |
| ## | 2311 | AT3G16640 | AT1G07930 | 0.25014300 | undirected | NA | NA |
| ## | 2312 | AT3G16640 | ATCG00950 | 0.30473478 | undirected | NA | NA |
| ## | 2313 | AT3G16640 | AT3G13920 | 0.27873859 | undirected | NA | NA |
| ## | 2314 | AT3G16640 | AT1G28290 | 0.24578085 | undirected | NA | NA |
| ## | 2315 | AT3G16640 | AT1G04270 | 0.29246966 | undirected | NA | NA |
| ## | 2316 | AT3G16640 | AT4G35100 | 0.32933455 | undirected | NA | NA |
| ## | 2317 | AT3G16640 | AT5G48480 | 0.28748273 | undirected | NA | NA |
| ## | 2318 | AT3G16640 | AT1G52400 | 0.25245758 | undirected | NA | NA |
| ## | 2319 | AT3G16640 | AT3G02470 | 0.13604285 | undirected | NA | NA |
| ## | 2320 | AT3G16640 | AT5G15200 | 0.37020208 | undirected | NA | NA |
| ## | 2321 | AT3G16640 | AT5G48485 | 0.28533496 | undirected | NA | NA |
| ## | 2322 | AT3G16640 | AT1G20620 | 0.28950589 | undirected | NA | NA |
| ## | 2323 | AT3G16640 | AT2G27720 | 0.30221549 | undirected | NA | NA |
| ## | 2324 | AT3G16640 | AT5G02870 | 0.26323536 | undirected | NA | NA |
| ## | 2325 | AT3G16640 | AT4G15000 | 0.33799257 | undirected | NA | NA |
| ## | 2326 | AT3G16640 | AT5G20290 | 0.13334689 | undirected | NA | NA |
| ## | 2327 | AT3G16640 | AT4G31700 | 0.18992549 | undirected | NA | NA |
| ## | 2328 | AT3G16640 | AT3G04400 | 0.09111828 | undirected | NA | NA |
| ## | 2329 | AT3G16640 | AT3G02230 | 0.24265276 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2330 | AT3G16640 | AT1G54410 | 0.32523033 | undirected | NA | NA |
| ## | 2331 | AT3G16640 | AT3G24830 | 0.33264021 | undirected | NA | NA |
| ## | 2332 | AT3G16640 | AT1G48920 | 0.09169922 | undirected | NA | NA |
| ## | 2333 | AT3G16640 | AT3G08770 | 0.32621766 | undirected | NA | NA |
| ## | 2334 | AT3G16640 | AT3G05590 | 0.34639262 | undirected | NA | NA |
| ## | 2335 | AT3G16640 | AT4G38680 | 0.29850504 | undirected | NA | NA |
| ## | 2336 | AT3G16640 | AT3G04840 | 0.24564240 | undirected | NA | NA |
| ## | 2337 | AT3G16640 | AT2G28790 | 0.16575923 | undirected | NA | NA |
| ## | 2338 | AT3G16640 | AT1G70600 | 0.28944957 | undirected | NA | NA |
| ## | 2339 | AT3G16640 | AT4G27090 | 0.29355131 | undirected | NA | NA |
| ## | 2340 | AT3G16640 | AT1G77510 | 0.24273767 | undirected | NA | NA |
| ## | 2341 | AT3G16640 | AT1G70830 | 0.12333071 | undirected | NA | NA |
| ## | 2342 | AT3G16640 | AT1G15690 | 0.24740010 | undirected | NA | NA |
| ## | 2343 | AT3G16640 | AT3G52590 | 0.13000261 | undirected | NA | NA |
| ## | 2344 | AT3G16640 | AT5G07090 | 0.25509234 | undirected | NA | NA |
| ## | 2345 | AT3G16640 | AT5G17920 | 0.09905768 | undirected | NA | NA |
| ## | 2346 | AT3G16640 | AT5G56030 | 0.26149274 | undirected | NA | NA |
| ## | 2347 | AT3G16640 | AT2G41840 | 0.29165803 | undirected | NA | NA |
| ## | 2348 | AT3G16640 | AT3G60245 | 0.26975876 | undirected | NA | NA |
| ## | 2349 | AT3G16640 | AT2G08665 | 0.26943406 | undirected | NA | NA |
| ## | 2350 | AT3G16640 | AT3G26520 | 0.03300145 | undirected | NA | NA |
| ## | 2351 | AT3G16640 | AT2G42840 | 0.27897886 | undirected | NA | NA |
| ## | 2352 | AT3G16640 | AT1G72370 | 0.17816183 | undirected | NA | NA |
| ## | 2353 | AT3G16640 | AT2G05520 | 0.31916271 | undirected | NA | NA |
| ## | 2354 | AT3G16640 | AT4G22513 | 0.29820136 | undirected | NA | NA |
| ## | 2355 | AT3G16640 | AT4G22530 | 0.30851291 | undirected | NA | NA |
| ## | 2356 | AT3G16640 | ATCG01210 | 0.28436603 | undirected | NA | NA |
| ## | 2357 | AT3G16640 | AT3G25520 | 0.31573167 | undirected | NA | NA |
| ## | 2358 | AT4G34870 | AT4G29030 | 0.23511682 | undirected | NA | NA |
| ## | 2359 | AT4G34870 | AT2G02100 | 0.38885240 | undirected | NA | NA |
| ## | 2360 | AT4G34870 | AT3G05727 | 0.25537930 | undirected | NA | NA |
| ## | 2361 | AT4G34870 | AT5G27850 | 0.28301351 | undirected | NA | NA |
| ## | 2362 | AT4G34870 | AT1G43170 | 0.07181569 | undirected | NA | NA |
| ## | 2363 | AT4G34870 | AT4G22495 | 0.32174078 | undirected | NA | NA |
| ## | 2364 | AT4G34870 | AT3G09200 | 0.16618410 | undirected | NA | NA |
| ## | 2365 | AT4G34870 | AT1G14320 | 0.27581532 | undirected | NA | NA |
| ## | 2366 | AT4G34870 | AT1G13930 | 0.30665136 | undirected | NA | NA |
| ## | 2367 | AT4G34870 | AT2G36530 | 0.26462205 | undirected | NA | NA |
| ## | 2368 | AT4G34870 | AT3G49910 | 0.29286081 | undirected | NA | NA |
| ## | 2369 | AT4G34870 | AT2G34480 | 0.32413544 | undirected | NA | NA |
| ## | 2370 | AT4G34870 | AT5G02960 | 0.22535449 | undirected | NA | NA |
| ## | 2371 | AT4G34870 | AT2G18020 | 0.25652834 | undirected | NA | NA |
| ## | 2372 | AT4G34870 | AT1G13440 | 0.30155543 | undirected | NA | NA |
| ## | 2373 | AT4G34870 | AT2G16600 | 0.29072363 | undirected | NA | NA |
| ## | 2374 | AT4G34870 | AT1G07920 | 0.11172315 | undirected | NA | NA |
| ## | 2375 | AT4G34870 | AT1G04410 | 0.26567840 | undirected | NA | NA |
| ## | 2376 | AT4G34870 | AT2G36830 | 0.25047783 | undirected | NA | NA |
| ## | 2377 | AT4G34870 | AT3G15353 | 0.29399139 | undirected | NA | NA |
| ## | 2378 | AT4G34870 | AT1G62480 | 0.31425903 | undirected | NA | NA |
| ## | 2379 | AT4G34870 | AT5G38940 | 0.26292995 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2380 | AT4G34870 | ATCG01180 | 0.31992402 | undirected | NA | NA |
| ## | 2381 | AT4G34870 | AT1G07930 | 0.18504186 | undirected | NA | NA |
| ## | 2382 | AT4G34870 | ATCG00950 | 0.36351493 | undirected | NA | NA |
| ## | 2383 | AT4G34870 | AT3G13920 | 0.16989426 | undirected | NA | NA |
| ## | 2384 | AT4G34870 | AT1G28290 | 0.11025425 | undirected | NA | NA |
| ## | 2385 | AT4G34870 | AT1G04270 | 0.30707001 | undirected | NA | NA |
| ## | 2386 | AT4G34870 | AT4G35100 | 0.38329787 | undirected | NA | NA |
| ## | 2387 | AT4G34870 | AT5G48480 | 0.26432089 | undirected | NA | NA |
| ## | 2388 | AT4G34870 | AT1G52400 | 0.07904933 | undirected | NA | NA |
| ## | 2389 | AT4G34870 | AT3G02470 | 0.21232713 | undirected | NA | NA |
| ## | 2390 | AT4G34870 | AT5G15200 | 0.31366137 | undirected | NA | NA |
| ## | 2391 | AT4G34870 | AT5G48485 | 0.34958367 | undirected | NA | NA |
| ## | 2392 | AT4G34870 | AT1G20620 | 0.22003401 | undirected | NA | NA |
| ## | 2393 | AT4G34870 | AT2G27720 | 0.26272886 | undirected | NA | NA |
| ## | 2394 | AT4G34870 | AT5G02870 | 0.11953302 | undirected | NA | NA |
| ## | 2395 | AT4G34870 | AT4G15000 | 0.33666309 | undirected | NA | NA |
| ## | 2396 | AT4G34870 | AT5G20290 | 0.18973212 | undirected | NA | NA |
| ## | 2397 | AT4G34870 | AT4G31700 | 0.05300564 | undirected | NA | NA |
| ## | 2398 | AT4G34870 | AT3G04400 | 0.18675364 | undirected | NA | NA |
| ## | 2399 | AT4G34870 | AT3G02230 | 0.22566006 | undirected | NA | NA |
| ## | 2400 | AT4G34870 | AT1G54410 | 0.36921091 | undirected | NA | NA |
| ## | 2401 | AT4G34870 | AT3G24830 | 0.29501400 | undirected | NA | NA |
| ## | 2402 | AT4G34870 | AT1G48920 | 0.18961812 | undirected | NA | NA |
| ## | 2403 | AT4G34870 | AT3G08770 | 0.24729029 | undirected | NA | NA |
| ## | 2404 | AT4G34870 | AT3G05590 | 0.23460829 | undirected | NA | NA |
| ## | 2405 | AT4G34870 | AT4G38680 | 0.35173953 | undirected | NA | NA |
| ## | 2406 | AT4G34870 | AT3G04840 | 0.23900264 | undirected | NA | NA |
| ## | 2407 | AT4G34870 | AT2G28790 | 0.28911749 | undirected | NA | NA |
| ## | 2408 | AT4G34870 | AT1G70600 | 0.19792283 | undirected | NA | NA |
| ## | 2409 | AT4G34870 | AT4G27090 | 0.35904577 | undirected | NA | NA |
| ## | 2410 | AT4G34870 | AT1G77510 | 0.22396515 | undirected | NA | NA |
| ## | 2411 | AT4G34870 | AT1G70830 | 0.16970164 | undirected | NA | NA |
| ## | 2412 | AT4G34870 | AT1G15690 | 0.06264843 | undirected | NA | NA |
| ## | 2413 | AT4G34870 | AT3G52590 | 0.08993041 | undirected | NA | NA |
| ## | 2414 | AT4G34870 | AT5G07090 | 0.14120637 | undirected | NA | NA |
| ## | 2415 | AT4G34870 | AT5G17920 | 0.19337866 | undirected | NA | NA |
| ## | 2416 | AT4G34870 | AT5G56030 | 0.29233840 | undirected | NA | NA |
| ## | 2417 | AT4G34870 | AT2G41840 | 0.37403607 | undirected | NA | NA |
| ## | 2418 | AT4G34870 | AT3G60245 | 0.21918038 | undirected | NA | NA |
| ## | 2419 | AT4G34870 | AT2G08665 | 0.08747879 | undirected | NA | NA |
| ## | 2420 | AT4G34870 | AT3G26520 | 0.08872754 | undirected | NA | NA |
| ## | 2421 | AT4G34870 | AT2G42840 | 0.30338099 | undirected | NA | NA |
| ## | 2422 | AT4G34870 | AT1G72370 | 0.26119382 | undirected | NA | NA |
| ## | 2423 | AT4G34870 | AT2G05520 | 0.35748820 | undirected | NA | NA |
| ## | 2424 | AT4G34870 | AT4G22513 | 0.31199961 | undirected | NA | NA |
| ## | 2425 | AT4G34870 | AT4G22530 | 0.32065936 | undirected | NA | NA |
| ## | 2426 | AT4G34870 | ATCG01210 | 0.34347991 | undirected | NA | NA |
| ## | 2427 | AT4G34870 | AT3G25520 | 0.11752076 | undirected | NA | NA |
| ## | 2428 | AT4G29030 | AT2G02100 | 0.15184989 | undirected | NA | NA |
| ## | 2429 | AT4G29030 | AT3G05727 | 0.11488446 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2430 | AT4G29030 | AT5G27850 | 0.10203935 | undirected | NA | NA |
| ## | 2431 | AT4G29030 | AT4G22495 | 0.22666044 | undirected | NA | NA |
| ## | 2432 | AT4G29030 | AT3G09200 | 0.08225864 | undirected | NA | NA |
| ## | 2433 | AT4G29030 | AT1G14320 | 0.20071164 | undirected | NA | NA |
| ## | 2434 | AT4G29030 | AT1G13930 | 0.11423366 | undirected | NA | NA |
| ## | 2435 | AT4G29030 | AT2G36530 | 0.24392424 | undirected | NA | NA |
| ## | 2436 | AT4G29030 | AT3G49910 | 0.14724142 | undirected | NA | NA |
| ## | 2437 | AT4G29030 | AT2G34480 | 0.19931527 | undirected | NA | NA |
| ## | 2438 | AT4G29030 | AT5G02960 | 0.07859644 | undirected | NA | NA |
| ## | 2439 | AT4G29030 | AT2G18020 | 0.12243826 | undirected | NA | NA |
| ## | 2440 | AT4G29030 | AT1G13440 | 0.15066038 | undirected | NA | NA |
| ## | 2441 | AT4G29030 | AT2G16600 | 0.08954804 | undirected | NA | NA |
| ## | 2442 | AT4G29030 | AT1G07920 | 0.04726603 | undirected | NA | NA |
| ## | 2443 | AT4G29030 | AT1G04410 | 0.30930102 | undirected | NA | NA |
| ## | 2444 | AT4G29030 | AT2G36830 | 0.10059303 | undirected | NA | NA |
| ## | 2445 | AT4G29030 | AT3G15353 | 0.27861467 | undirected | NA | NA |
| ## | 2446 | AT4G29030 | AT1G62480 | 0.22685203 | undirected | NA | NA |
| ## | 2447 | AT4G29030 | AT5G38940 | 0.09467245 | undirected | NA | NA |
| ## | 2448 | AT4G29030 | ATCG01180 | 0.21774810 | undirected | NA | NA |
| ## | 2449 | AT4G29030 | AT1G07930 | 0.14570780 | undirected | NA | NA |
| ## | 2450 | AT4G29030 | ATCG00950 | 0.16102270 | undirected | NA | NA |
| ## | 2451 | AT4G29030 | AT3G13920 | 0.04798712 | undirected | NA | NA |
| ## | 2452 | AT4G29030 | AT1G28290 | 0.02976293 | undirected | NA | NA |
| ## | 2453 | AT4G29030 | AT1G04270 | 0.15257028 | undirected | NA | NA |
| ## | 2454 | AT4G29030 | AT4G35100 | 0.14893167 | undirected | NA | NA |
| ## | 2455 | AT4G29030 | AT5G48480 | 0.11887029 | undirected | NA | NA |
| ## | 2456 | AT4G29030 | AT3G02470 | 0.09429230 | undirected | NA | NA |
| ## | 2457 | AT4G29030 | AT5G15200 | 0.10667181 | undirected | NA | NA |
| ## | 2458 | AT4G29030 | AT5G48485 | 0.18784892 | undirected | NA | NA |
| ## | 2459 | AT4G29030 | AT1G20620 | 0.10631087 | undirected | NA | NA |
| ## | 2460 | AT4G29030 | AT2G27720 | 0.10389256 | undirected | NA | NA |
| ## | 2461 | AT4G29030 | AT5G02870 | 0.03410210 | undirected | NA | NA |
| ## | 2462 | AT4G29030 | AT4G15000 | 0.14400031 | undirected | NA | NA |
| ## | 2463 | AT4G29030 | AT5G20290 | 0.21823905 | undirected | NA | NA |
| ## | 2464 | AT4G29030 | AT4G31700 | 0.02352459 | undirected | NA | NA |
| ## | 2465 | AT4G29030 | AT3G04400 | 0.16822764 | undirected | NA | NA |
| ## | 2466 | AT4G29030 | AT3G02230 | 0.09147800 | undirected | NA | NA |
| ## | 2467 | AT4G29030 | AT1G54410 | 0.16177801 | undirected | NA | NA |
| ## | 2468 | AT4G29030 | AT3G24830 | 0.08759953 | undirected | NA | NA |
| ## | 2469 | AT4G29030 | AT1G48920 | 0.20295830 | undirected | NA | NA |
| ## | 2470 | AT4G29030 | AT3G08770 | 0.19095858 | undirected | NA | NA |
| ## | 2471 | AT4G29030 | AT3G05590 | 0.06942850 | undirected | NA | NA |
| ## | 2472 | AT4G29030 | AT4G38680 | 0.20670830 | undirected | NA | NA |
| ## | 2473 | AT4G29030 | AT3G04840 | 0.14927921 | undirected | NA | NA |
| ## | 2474 | AT4G29030 | AT2G28790 | 0.19001856 | undirected | NA | NA |
| ## | 2475 | AT4G29030 | AT1G70600 | 0.07502913 | undirected | NA | NA |
| ## | 2476 | AT4G29030 | AT4G27090 | 0.22424671 | undirected | NA | NA |
| ## | 2477 | AT4G29030 | AT1G77510 | 0.09855017 | undirected | NA | NA |
| ## | 2478 | AT4G29030 | AT1G70830 | 0.04498283 | undirected | NA | NA |
| ## | 2479 | AT4G29030 | AT1G15690 | 0.02107408 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2480 | AT4G29030 | AT5G07090 | 0.03882560 | undirected | NA | NA |
| ## | 2481 | AT4G29030 | AT5G17920 | 0.06811602 | undirected | NA | NA |
| ## | 2482 | AT4G29030 | AT5G56030 | 0.12861957 | undirected | NA | NA |
| ## | 2483 | AT4G29030 | AT2G41840 | 0.13254710 | undirected | NA | NA |
| ## | 2484 | AT4G29030 | AT3G60245 | 0.11834769 | undirected | NA | NA |
| ## | 2485 | AT4G29030 | AT2G08665 | 0.02286170 | undirected | NA | NA |
| ## | 2486 | AT4G29030 | AT3G26520 | 0.06100517 | undirected | NA | NA |
| ## | 2487 | AT4G29030 | AT2G42840 | 0.23848320 | undirected | NA | NA |
| ## | 2488 | AT4G29030 | AT1G72370 | 0.24714605 | undirected | NA | NA |
| ## | 2489 | AT4G29030 | AT2G05520 | 0.15764089 | undirected | NA | NA |
| ## | 2490 | AT4G29030 | AT4G22513 | 0.11173732 | undirected | NA | NA |
| ## | 2491 | AT4G29030 | AT4G22530 | 0.15442064 | undirected | NA | NA |
| ## | 2492 | AT4G29030 | ATCG01210 | 0.15743199 | undirected | NA | NA |
| ## | 2493 | AT4G29030 | AT3G25520 | 0.04151264 | undirected | NA | NA |
| ## | 2494 | AT2G02100 | AT3G05727 | 0.25166566 | undirected | NA | NA |
| ## | 2495 | AT2G02100 | AT5G27850 | 0.28400237 | undirected | NA | NA |
| ## | 2496 | AT2G02100 | AT1G43170 | 0.21181021 | undirected | NA | NA |
| ## | 2497 | AT2G02100 | AT4G22495 | 0.45195514 | undirected | NA | NA |
| ## | 2498 | AT2G02100 | AT3G09200 | 0.25995331 | undirected | NA | NA |
| ## | 2499 | AT2G02100 | AT1G14320 | 0.46616775 | undirected | NA | NA |
| ## | 2500 | AT2G02100 | AT1G13930 | 0.38996485 | undirected | NA | NA |
| ## | 2501 | AT2G02100 | AT2G36530 | 0.26267495 | undirected | NA | NA |
| ## | 2502 | AT2G02100 | AT3G49910 | 0.47052888 | undirected | NA | NA |
| ## | 2503 | AT2G02100 | AT2G34480 | 0.35999885 | undirected | NA | NA |
| ## | 2504 | AT2G02100 | AT5G02960 | 0.31062624 | undirected | NA | NA |
| ## | 2505 | AT2G02100 | AT2G18020 | 0.28015680 | undirected | NA | NA |
| ## | 2506 | AT2G02100 | AT1G13440 | 0.28663586 | undirected | NA | NA |
| ## | 2507 | AT2G02100 | AT2G16600 | 0.33132525 | undirected | NA | NA |
| ## | 2508 | AT2G02100 | AT1G07920 | 0.15596441 | undirected | NA | NA |
| ## | 2509 | AT2G02100 | AT1G04410 | 0.28310602 | undirected | NA | NA |
| ## | 2510 | AT2G02100 | AT2G36830 | 0.31941963 | undirected | NA | NA |
| ## | 2511 | AT2G02100 | AT3G15353 | 0.32310477 | undirected | NA | NA |
| ## | 2512 | AT2G02100 | AT1G62480 | 0.46775338 | undirected | NA | NA |
| ## | 2513 | AT2G02100 | AT5G38940 | 0.28366102 | undirected | NA | NA |
| ## | 2514 | AT2G02100 | ATCG01180 | 0.37718058 | undirected | NA | NA |
| ## | 2515 | AT2G02100 | AT1G07930 | 0.25500084 | undirected | NA | NA |
| ## | 2516 | AT2G02100 | ATCG00950 | 0.41990522 | undirected | NA | NA |
| ## | 2517 | AT2G02100 | AT3G13920 | 0.26674023 | undirected | NA | NA |
| ## | 2518 | AT2G02100 | AT1G28290 | 0.29622302 | undirected | NA | NA |
| ## | 2519 | AT2G02100 | AT1G04270 | 0.36308849 | undirected | NA | NA |
| ## | 2520 | AT2G02100 | AT4G35100 | 0.38352350 | undirected | NA | NA |
| ## | 2521 | AT2G02100 | AT5G48480 | 0.37090480 | undirected | NA | NA |
| ## | 2522 | AT2G02100 | AT1G52400 | 0.22814264 | undirected | NA | NA |
| ## | 2523 | AT2G02100 | AT3G02470 | 0.28727582 | undirected | NA | NA |
| ## | 2524 | AT2G02100 | AT5G15200 | 0.35124659 | undirected | NA | NA |
| ## | 2525 | AT2G02100 | AT5G48485 | 0.46788836 | undirected | NA | NA |
| ## | 2526 | AT2G02100 | AT1G20620 | 0.32878567 | undirected | NA | NA |
| ## | 2527 | AT2G02100 | AT2G27720 | 0.45161083 | undirected | NA | NA |
| ## | 2528 | AT2G02100 | AT5G02870 | 0.22883566 | undirected | NA | NA |
| ## | 2529 | AT2G02100 | AT4G15000 | 0.33753465 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2530 | AT2G02100 | AT5G20290 | 0.14696263 | undirected | NA | NA |
| ## | 2531 | AT2G02100 | AT4G31700 | 0.12892256 | undirected | NA | NA |
| ## | 2532 | AT2G02100 | AT3G04400 | 0.19400739 | undirected | NA | NA |
| ## | 2533 | AT2G02100 | AT3G02230 | 0.22942587 | undirected | NA | NA |
| ## | 2534 | AT2G02100 | AT1G54410 | 0.35793277 | undirected | NA | NA |
| ## | 2535 | AT2G02100 | AT3G24830 | 0.35350377 | undirected | NA | NA |
| ## | 2536 | AT2G02100 | AT1G48920 | 0.19164233 | undirected | NA | NA |
| ## | 2537 | AT2G02100 | AT3G08770 | 0.41120675 | undirected | NA | NA |
| ## | 2538 | AT2G02100 | AT3G05590 | 0.29022981 | undirected | NA | NA |
| ## | 2539 | AT2G02100 | AT4G38680 | 0.42697812 | undirected | NA | NA |
| ## | 2540 | AT2G02100 | AT3G04840 | 0.48267080 | undirected | NA | NA |
| ## | 2541 | AT2G02100 | AT2G28790 | 0.33090398 | undirected | NA | NA |
| ## | 2542 | AT2G02100 | AT1G70600 | 0.28152927 | undirected | NA | NA |
| ## | 2543 | AT2G02100 | AT4G27090 | 0.39314845 | undirected | NA | NA |
| ## | 2544 | AT2G02100 | AT1G77510 | 0.29981502 | undirected | NA | NA |
| ## | 2545 | AT2G02100 | AT1G70830 | 0.25825388 | undirected | NA | NA |
| ## | 2546 | AT2G02100 | AT1G15690 | 0.19916614 | undirected | NA | NA |
| ## | 2547 | AT2G02100 | AT3G52590 | 0.23296469 | undirected | NA | NA |
| ## | 2548 | AT2G02100 | AT5G07090 | 0.20110177 | undirected | NA | NA |
| ## | 2549 | AT2G02100 | AT5G17920 | 0.27964211 | undirected | NA | NA |
| ## | 2550 | AT2G02100 | AT5G56030 | 0.25066925 | undirected | NA | NA |
| ## | 2551 | AT2G02100 | AT2G41840 | 0.41603480 | undirected | NA | NA |
| ## | 2552 | AT2G02100 | AT3G60245 | 0.32160070 | undirected | NA | NA |
| ## | 2553 | AT2G02100 | AT2G08665 | 0.27829162 | undirected | NA | NA |
| ## | 2554 | AT2G02100 | AT3G26520 | 0.08672664 | undirected | NA | NA |
| ## | 2555 | AT2G02100 | AT2G42840 | 0.46742399 | undirected | NA | NA |
| ## | 2556 | AT2G02100 | AT1G72370 | 0.26457170 | undirected | NA | NA |
| ## | 2557 | AT2G02100 | AT2G05520 | 0.33949857 | undirected | NA | NA |
| ## | 2558 | AT2G02100 | AT4G22513 | 0.31990310 | undirected | NA | NA |
| ## | 2559 | AT2G02100 | AT4G22530 | 0.38845381 | undirected | NA | NA |
| ## | 2560 | AT2G02100 | ATCG01210 | 0.45552060 | undirected | NA | NA |
| ## | 2561 | AT2G02100 | AT3G25520 | 0.32708658 | undirected | NA | NA |
| ## | 2562 | AT3G05727 | AT5G27850 | 0.30293784 | undirected | NA | NA |
| ## | 2563 | AT3G05727 | AT1G43170 | 0.27756306 | undirected | NA | NA |
| ## | 2564 | AT3G05727 | AT4G22495 | 0.26185848 | undirected | NA | NA |
| ## | 2565 | AT3G05727 | AT3G09200 | 0.31481270 | undirected | NA | NA |
| ## | 2566 | AT3G05727 | AT1G14320 | 0.20846054 | undirected | NA | NA |
| ## | 2567 | AT3G05727 | AT1G13930 | 0.27482672 | undirected | NA | NA |
| ## | 2568 | AT3G05727 | AT2G36530 | 0.11970987 | undirected | NA | NA |
| ## | 2569 | AT3G05727 | AT3G49910 | 0.17891453 | undirected | NA | NA |
| ## | 2570 | AT3G05727 | AT2G34480 | 0.33407547 | undirected | NA | NA |
| ## | 2571 | AT3G05727 | AT5G02960 | 0.30105095 | undirected | NA | NA |
| ## | 2572 | AT3G05727 | AT2G18020 | 0.29712506 | undirected | NA | NA |
| ## | 2573 | AT3G05727 | AT1G13440 | 0.34736877 | undirected | NA | NA |
| ## | 2574 | AT3G05727 | AT2G16600 | 0.25904619 | undirected | NA | NA |
| ## | 2575 | AT3G05727 | AT1G07920 | 0.33390016 | undirected | NA | NA |
| ## | 2576 | AT3G05727 | AT1G04410 | 0.24398214 | undirected | NA | NA |
| ## | 2577 | AT3G05727 | AT2G36830 | 0.32674841 | undirected | NA | NA |
| ## | 2578 | AT3G05727 | AT3G15353 | 0.16249495 | undirected | NA | NA |
| ## | 2579 | AT3G05727 | AT1G62480 | 0.24753446 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2580 | AT3G05727 | AT5G38940 | 0.31872285 | undirected | NA | NA |
| ## | 2581 | AT3G05727 | ATCG01180 | 0.31102125 | undirected | NA | NA |
| ## | 2582 | AT3G05727 | AT1G07930 | 0.35159346 | undirected | NA | NA |
| ## | 2583 | AT3G05727 | ATCG00950 | 0.27133085 | undirected | NA | NA |
| ## | 2584 | AT3G05727 | AT3G13920 | 0.29213950 | undirected | NA | NA |
| ## | 2585 | AT3G05727 | AT1G28290 | 0.26833527 | undirected | NA | NA |
| ## | 2586 | AT3G05727 | AT1G04270 | 0.32393120 | undirected | NA | NA |
| ## | 2587 | AT3G05727 | AT4G35100 | 0.29539889 | undirected | NA | NA |
| ## | 2588 | AT3G05727 | AT5G48480 | 0.32172354 | undirected | NA | NA |
| ## | 2589 | AT3G05727 | AT1G52400 | 0.23383650 | undirected | NA | NA |
| ## | 2590 | AT3G05727 | AT3G02470 | 0.08900576 | undirected | NA | NA |
| ## | 2591 | AT3G05727 | AT5G15200 | 0.35213453 | undirected | NA | NA |
| ## | 2592 | AT3G05727 | AT5G48485 | 0.24203917 | undirected | NA | NA |
| ## | 2593 | AT3G05727 | AT1G20620 | 0.34134535 | undirected | NA | NA |
| ## | 2594 | AT3G05727 | AT2G27720 | 0.24946781 | undirected | NA | NA |
| ## | 2595 | AT3G05727 | AT5G02870 | 0.29571481 | undirected | NA | NA |
| ## | 2596 | AT3G05727 | AT4G15000 | 0.32704187 | undirected | NA | NA |
| ## | 2597 | AT3G05727 | AT5G20290 | 0.21031258 | undirected | NA | NA |
| ## | 2598 | AT3G05727 | AT4G31700 | 0.31617633 | undirected | NA | NA |
| ## | 2599 | AT3G05727 | AT3G04400 | 0.09608259 | undirected | NA | NA |
| ## | 2600 | AT3G05727 | AT3G02230 | 0.29245170 | undirected | NA | NA |
| ## | 2601 | AT3G05727 | AT1G54410 | 0.31582941 | undirected | NA | NA |
| ## | 2602 | AT3G05727 | AT3G24830 | 0.30330826 | undirected | NA | NA |
| ## | 2603 | AT3G05727 | AT1G48920 | 0.09110434 | undirected | NA | NA |
| ## | 2604 | AT3G05727 | AT3G08770 | 0.31013274 | undirected | NA | NA |
| ## | 2605 | AT3G05727 | AT3G05590 | 0.37218185 | undirected | NA | NA |
| ## | 2606 | AT3G05727 | AT4G38680 | 0.29291504 | undirected | NA | NA |
| ## | 2607 | AT3G05727 | AT3G04840 | 0.18514793 | undirected | NA | NA |
| ## | 2608 | AT3G05727 | AT2G28790 | 0.12957244 | undirected | NA | NA |
| ## | 2609 | AT3G05727 | AT1G70600 | 0.32674063 | undirected | NA | NA |
| ## | 2610 | AT3G05727 | AT4G27090 | 0.30586308 | undirected | NA | NA |
| ## | 2611 | AT3G05727 | AT1G77510 | 0.32357781 | undirected | NA | NA |
| ## | 2612 | AT3G05727 | AT1G70830 | 0.08246457 | undirected | NA | NA |
| ## | 2613 | AT3G05727 | AT1G15690 | 0.28342984 | undirected | NA | NA |
| ## | 2614 | AT3G05727 | AT3G52590 | 0.07597511 | undirected | NA | NA |
| ## | 2615 | AT3G05727 | AT5G07090 | 0.29607916 | undirected | NA | NA |
| ## | 2616 | AT3G05727 | AT5G17920 | 0.06455744 | undirected | NA | NA |
| ## | 2617 | AT3G05727 | AT5G56030 | 0.30538339 | undirected | NA | NA |
| ## | 2618 | AT3G05727 | AT2G41840 | 0.22883806 | undirected | NA | NA |
| ## | 2619 | AT3G05727 | AT3G60245 | 0.34310309 | undirected | NA | NA |
| ## | 2620 | AT3G05727 | AT2G08665 | 0.31099699 | undirected | NA | NA |
| ## | 2621 | AT3G05727 | AT2G42840 | 0.23887899 | undirected | NA | NA |
| ## | 2622 | AT3G05727 | AT1G72370 | 0.18786154 | undirected | NA | NA |
| ## | 2623 | AT3G05727 | AT2G05520 | 0.30448388 | undirected | NA | NA |
| ## | 2624 | AT3G05727 | AT4G22513 | 0.28763802 | undirected | NA | NA |
| ## | 2625 | AT3G05727 | AT4G22530 | 0.28776682 | undirected | NA | NA |
| ## | 2626 | AT3G05727 | ATCG01210 | 0.22564307 | undirected | NA | NA |
| ## | 2627 | AT3G05727 | AT3G25520 | 0.29672019 | undirected | NA | NA |
| ## | 2628 | AT5G27850 | AT1G43170 | 0.18129977 | undirected | NA | NA |
| ## | 2629 | AT5G27850 | AT4G22495 | 0.28760321 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2630 | AT5G27850 | AT3G09200 | 0.28502786 | undirected | NA | NA |
| ## | 2631 | AT5G27850 | AT1G14320 | 0.25404463 | undirected | NA | NA |
| ## | 2632 | AT5G27850 | AT1G13930 | 0.31068511 | undirected | NA | NA |
| ## | 2633 | AT5G27850 | AT2G36530 | 0.11883970 | undirected | NA | NA |
| ## | 2634 | AT5G27850 | AT3G49910 | 0.23260245 | undirected | NA | NA |
| ## | 2635 | AT5G27850 | AT2G34480 | 0.31221478 | undirected | NA | NA |
| ## | 2636 | AT5G27850 | AT5G02960 | 0.27233878 | undirected | NA | NA |
| ## | 2637 | AT5G27850 | AT2G18020 | 0.31741484 | undirected | NA | NA |
| ## | 2638 | AT5G27850 | AT1G13440 | 0.31753047 | undirected | NA | NA |
| ## | 2639 | AT5G27850 | AT2G16600 | 0.29407995 | undirected | NA | NA |
| ## | 2640 | AT5G27850 | AT1G07920 | 0.27101194 | undirected | NA | NA |
| ## | 2641 | AT5G27850 | AT1G04410 | 0.22859304 | undirected | NA | NA |
| ## | 2642 | AT5G27850 | AT2G36830 | 0.30585099 | undirected | NA | NA |
| ## | 2643 | AT5G27850 | AT3G15353 | 0.16186161 | undirected | NA | NA |
| ## | 2644 | AT5G27850 | AT1G62480 | 0.28035230 | undirected | NA | NA |
| ## | 2645 | AT5G27850 | AT5G38940 | 0.29938627 | undirected | NA | NA |
| ## | 2646 | AT5G27850 | ATCG01180 | 0.31061640 | undirected | NA | NA |
| ## | 2647 | AT5G27850 | AT1G07930 | 0.30386914 | undirected | NA | NA |
| ## | 2648 | AT5G27850 | ATCG00950 | 0.28354744 | undirected | NA | NA |
| ## | 2649 | AT5G27850 | AT3G13920 | 0.25917750 | undirected | NA | NA |
| ## | 2650 | AT5G27850 | AT1G28290 | 0.27186190 | undirected | NA | NA |
| ## | 2651 | AT5G27850 | AT1G04270 | 0.31809875 | undirected | NA | NA |
| ## | 2652 | AT5G27850 | AT4G35100 | 0.31708355 | undirected | NA | NA |
| ## | 2653 | AT5G27850 | AT5G48480 | 0.31745861 | undirected | NA | NA |
| ## | 2654 | AT5G27850 | AT1G52400 | 0.21012751 | undirected | NA | NA |
| ## | 2655 | AT5G27850 | AT3G02470 | 0.12436518 | undirected | NA | NA |
| ## | 2656 | AT5G27850 | AT5G15200 | 0.34293259 | undirected | NA | NA |
| ## | 2657 | AT5G27850 | AT5G48485 | 0.27563481 | undirected | NA | NA |
| ## | 2658 | AT5G27850 | AT1G20620 | 0.31203621 | undirected | NA | NA |
| ## | 2659 | AT5G27850 | AT2G27720 | 0.26376550 | undirected | NA | NA |
| ## | 2660 | AT5G27850 | AT5G02870 | 0.25367217 | undirected | NA | NA |
| ## | 2661 | AT5G27850 | AT4G15000 | 0.31689030 | undirected | NA | NA |
| ## | 2662 | AT5G27850 | AT5G20290 | 0.20014872 | undirected | NA | NA |
| ## | 2663 | AT5G27850 | AT4G31700 | 0.23696928 | undirected | NA | NA |
| ## | 2664 | AT5G27850 | AT3G04400 | 0.09854326 | undirected | NA | NA |
| ## | 2665 | AT5G27850 | AT3G02230 | 0.29991291 | undirected | NA | NA |
| ## | 2666 | AT5G27850 | AT1G54410 | 0.31257835 | undirected | NA | NA |
| ## | 2667 | AT5G27850 | AT3G24830 | 0.32694775 | undirected | NA | NA |
| ## | 2668 | AT5G27850 | AT1G48920 | 0.08917786 | undirected | NA | NA |
| ## | 2669 | AT5G27850 | AT3G08770 | 0.29128459 | undirected | NA | NA |
| ## | 2670 | AT5G27850 | AT3G05590 | 0.35634822 | undirected | NA | NA |
| ## | 2671 | AT5G27850 | AT4G38680 | 0.30719546 | undirected | NA | NA |
| ## | 2672 | AT5G27850 | AT3G04840 | 0.22484736 | undirected | NA | NA |
| ## | 2673 | AT5G27850 | AT2G28790 | 0.15008984 | undirected | NA | NA |
| ## | 2674 | AT5G27850 | AT1G70600 | 0.29110136 | undirected | NA | NA |
| ## | 2675 | AT5G27850 | AT4G27090 | 0.31568905 | undirected | NA | NA |
| ## | 2676 | AT5G27850 | AT1G77510 | 0.32578497 | undirected | NA | NA |
| ## | 2677 | AT5G27850 | AT1G70830 | 0.12890472 | undirected | NA | NA |
| ## | 2678 | AT5G27850 | AT1G15690 | 0.24525541 | undirected | NA | NA |
| ## | 2679 | AT5G27850 | AT3G52590 | 0.11844132 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2680 | AT5G27850 | AT5G07090 | 0.26234122 | undirected | NA | NA |
| ## | 2681 | AT5G27850 | AT5G17920 | 0.11284971 | undirected | NA | NA |
| ## | 2682 | AT5G27850 | AT5G56030 | 0.31600078 | undirected | NA | NA |
| ## | 2683 | AT5G27850 | AT2G41840 | 0.27373293 | undirected | NA | NA |
| ## | 2684 | AT5G27850 | AT3G60245 | 0.31861048 | undirected | NA | NA |
| ## | 2685 | AT5G27850 | AT2G08665 | 0.25878391 | undirected | NA | NA |
| ## | 2686 | AT5G27850 | AT2G42840 | 0.26761553 | undirected | NA | NA |
| ## | 2687 | AT5G27850 | AT1G72370 | 0.16078798 | undirected | NA | NA |
| ## | 2688 | AT5G27850 | AT2G05520 | 0.31361072 | undirected | NA | NA |
| ## | 2689 | AT5G27850 | AT4G22513 | 0.31486376 | undirected | NA | NA |
| ## | 2690 | AT5G27850 | AT4G22530 | 0.28905048 | undirected | NA | NA |
| ## | 2691 | AT5G27850 | ATCG01210 | 0.25966902 | undirected | NA | NA |
| ## | 2692 | AT5G27850 | AT3G25520 | 0.24812867 | undirected | NA | NA |
| ## | 2693 | AT1G43170 | AT4G22495 | 0.11883802 | undirected | NA | NA |
| ## | 2694 | AT1G43170 | AT3G09200 | 0.20036235 | undirected | NA | NA |
| ## | 2695 | AT1G43170 | AT1G14320 | 0.07916005 | undirected | NA | NA |
| ## | 2696 | AT1G43170 | AT1G13930 | 0.13705641 | undirected | NA | NA |
| ## | 2697 | AT1G43170 | AT2G36530 | 0.02312744 | undirected | NA | NA |
| ## | 2698 | AT1G43170 | AT3G49910 | 0.09511946 | undirected | NA | NA |
| ## | 2699 | AT1G43170 | AT2G34480 | 0.23377321 | undirected | NA | NA |
| ## | 2700 | AT1G43170 | AT5G02960 | 0.30733150 | undirected | NA | NA |
| ## | 2701 | AT1G43170 | AT2G18020 | 0.14041013 | undirected | NA | NA |
| ## | 2702 | AT1G43170 | AT1G13440 | 0.26326594 | undirected | NA | NA |
| ## | 2703 | AT1G43170 | AT2G16600 | 0.19536164 | undirected | NA | NA |
| ## | 2704 | AT1G43170 | AT1G07920 | 0.19938259 | undirected | NA | NA |
| ## | 2705 | AT1G43170 | AT1G04410 | 0.04362064 | undirected | NA | NA |
| ## | 2706 | AT1G43170 | AT2G36830 | 0.22287565 | undirected | NA | NA |
| ## | 2707 | AT1G43170 | AT3G15353 | 0.02786776 | undirected | NA | NA |
| ## | 2708 | AT1G43170 | AT1G62480 | 0.10047803 | undirected | NA | NA |
| ## | 2709 | AT1G43170 | AT5G38940 | 0.28928685 | undirected | NA | NA |
| ## | 2710 | AT1G43170 | ATCG01180 | 0.15933634 | undirected | NA | NA |
| ## | 2711 | AT1G43170 | AT1G07930 | 0.12200278 | undirected | NA | NA |
| ## | 2712 | AT1G43170 | ATCG00950 | 0.24024896 | undirected | NA | NA |
| ## | 2713 | AT1G43170 | AT3G13920 | 0.31158579 | undirected | NA | NA |
| ## | 2714 | AT1G43170 | AT1G28290 | 0.13023311 | undirected | NA | NA |
| ## | 2715 | AT1G43170 | AT1G04270 | 0.21122269 | undirected | NA | NA |
| ## | 2716 | AT1G43170 | AT4G35100 | 0.22730528 | undirected | NA | NA |
| ## | 2717 | AT1G43170 | AT5G48480 | 0.17958287 | undirected | NA | NA |
| ## | 2718 | AT1G43170 | AT1G52400 | 0.21142398 | undirected | NA | NA |
| ## | 2719 | AT1G43170 | AT5G15200 | 0.29962889 | undirected | NA | NA |
| ## | 2720 | AT1G43170 | AT5G48485 | 0.13992003 | undirected | NA | NA |
| ## | 2721 | AT1G43170 | AT1G20620 | 0.19148250 | undirected | NA | NA |
| ## | 2722 | AT1G43170 | AT2G27720 | 0.18344284 | undirected | NA | NA |
| ## | 2723 | AT1G43170 | AT5G02870 | 0.26106795 | undirected | NA | NA |
| ## | 2724 | AT1G43170 | AT4G15000 | 0.27516550 | undirected | NA | NA |
| ## | 2725 | AT1G43170 | AT4G31700 | 0.13703889 | undirected | NA | NA |
| ## | 2726 | AT1G43170 | AT3G02230 | 0.18049525 | undirected | NA | NA |
| ## | 2727 | AT1G43170 | AT1G54410 | 0.26761110 | undirected | NA | NA |
| ## | 2728 | AT1G43170 | AT3G24830 | 0.22628245 | undirected | NA | NA |
| ## | 2729 | AT1G43170 | AT3G08770 | 0.16139919 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2730 | AT1G43170 | AT3G05590 | 0.28642130 | undirected | NA | NA |
| ## | 2731 | AT1G43170 | AT4G38680 | 0.16455511 | undirected | NA | NA |
| ## | 2732 | AT1G43170 | AT3G04840 | 0.06627878 | undirected | NA | NA |
| ## | 2733 | AT1G43170 | AT2G28790 | 0.02065560 | undirected | NA | NA |
| ## | 2734 | AT1G43170 | AT1G70600 | 0.24617535 | undirected | NA | NA |
| ## | 2735 | AT1G43170 | AT4G27090 | 0.17914157 | undirected | NA | NA |
| ## | 2736 | AT1G43170 | AT1G77510 | 0.12616766 | undirected | NA | NA |
| ## | 2737 | AT1G43170 | AT1G15690 | 0.13999376 | undirected | NA | NA |
| ## | 2738 | AT1G43170 | AT5G07090 | 0.27957861 | undirected | NA | NA |
| ## | 2739 | AT1G43170 | AT5G56030 | 0.18012070 | undirected | NA | NA |
| ## | 2740 | AT1G43170 | AT2G41840 | 0.18770126 | undirected | NA | NA |
| ## | 2741 | AT1G43170 | AT3G60245 | 0.14147416 | undirected | NA | NA |
| ## | 2742 | AT1G43170 | AT2G08665 | 0.09901494 | undirected | NA | NA |
| ## | 2743 | AT1G43170 | AT2G42840 | 0.10469924 | undirected | NA | NA |
| ## | 2744 | AT1G43170 | AT1G72370 | 0.03028841 | undirected | NA | NA |
| ## | 2745 | AT1G43170 | AT2G05520 | 0.23961023 | undirected | NA | NA |
| ## | 2746 | AT1G43170 | AT4G22513 | 0.19036074 | undirected | NA | NA |
| ## | 2747 | AT1G43170 | AT4G22530 | 0.24149410 | undirected | NA | NA |
| ## | 2748 | AT1G43170 | ATCG01210 | 0.16791452 | undirected | NA | NA |
| ## | 2749 | AT1G43170 | AT3G25520 | 0.18250721 | undirected | NA | NA |
| ## | 2750 | AT4G22495 | AT3G09200 | 0.16996032 | undirected | NA | NA |
| ## | 2751 | AT4G22495 | AT1G14320 | 0.34952593 | undirected | NA | NA |
| ## | 2752 | AT4G22495 | AT1G13930 | 0.34558305 | undirected | NA | NA |
| ## | 2753 | AT4G22495 | AT2G36530 | 0.31885704 | undirected | NA | NA |
| ## | 2754 | AT4G22495 | AT3G49910 | 0.34139937 | undirected | NA | NA |
| ## | 2755 | AT4G22495 | AT2G34480 | 0.34372264 | undirected | NA | NA |
| ## | 2756 | AT4G22495 | AT5G02960 | 0.26265886 | undirected | NA | NA |
| ## | 2757 | AT4G22495 | AT2G18020 | 0.24563027 | undirected | NA | NA |
| ## | 2758 | AT4G22495 | AT1G13440 | 0.31994259 | undirected | NA | NA |
| ## | 2759 | AT4G22495 | AT2G16600 | 0.32028314 | undirected | NA | NA |
| ## | 2760 | AT4G22495 | AT1G07920 | 0.12055212 | undirected | NA | NA |
| ## | 2761 | AT4G22495 | AT1G04410 | 0.29481938 | undirected | NA | NA |
| ## | 2762 | AT4G22495 | AT2G36830 | 0.28205421 | undirected | NA | NA |
| ## | 2763 | AT4G22495 | AT3G15353 | 0.35452295 | undirected | NA | NA |
| ## | 2764 | AT4G22495 | AT1G62480 | 0.35597508 | undirected | NA | NA |
| ## | 2765 | AT4G22495 | AT5G38940 | 0.27211742 | undirected | NA | NA |
| ## | 2766 | AT4G22495 | ATCG01180 | 0.31946924 | undirected | NA | NA |
| ## | 2767 | AT4G22495 | AT1G07930 | 0.20395935 | undirected | NA | NA |
| ## | 2768 | AT4G22495 | ATCG00950 | 0.41634653 | undirected | NA | NA |
| ## | 2769 | AT4G22495 | AT3G13920 | 0.21095799 | undirected | NA | NA |
| ## | 2770 | AT4G22495 | AT1G28290 | 0.14788728 | undirected | NA | NA |
| ## | 2771 | AT4G22495 | AT1G04270 | 0.34194381 | undirected | NA | NA |
| ## | 2772 | AT4G22495 | AT4G35100 | 0.41463732 | undirected | NA | NA |
| ## | 2773 | AT4G22495 | AT5G48480 | 0.30475525 | undirected | NA | NA |
| ## | 2774 | AT4G22495 | AT1G52400 | 0.10413257 | undirected | NA | NA |
| ## | 2775 | AT4G22495 | AT3G02470 | 0.25463432 | undirected | NA | NA |
| ## | 2776 | AT4G22495 | AT5G15200 | 0.34080356 | undirected | NA | NA |
| ## | 2777 | AT4G22495 | AT5G48485 | 0.38790198 | undirected | NA | NA |
| ## | 2778 | AT4G22495 | AT1G20620 | 0.25013566 | undirected | NA | NA |
| ## | 2779 | AT4G22495 | AT2G27720 | 0.32473626 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2780 | AT4G22495 | AT5G02870 | 0.14724913 | undirected | NA | NA |
| ## | 2781 | AT4G22495 | AT4G15000 | 0.36020864 | undirected | NA | NA |
| ## | 2782 | AT4G22495 | AT5G20290 | 0.17019404 | undirected | NA | NA |
| ## | 2783 | AT4G22495 | AT4G31700 | 0.07115965 | undirected | NA | NA |
| ## | 2784 | AT4G22495 | AT3G04400 | 0.24368412 | undirected | NA | NA |
| ## | 2785 | AT4G22495 | AT3G02230 | 0.21774349 | undirected | NA | NA |
| ## | 2786 | AT4G22495 | AT1G54410 | 0.40101634 | undirected | NA | NA |
| ## | 2787 | AT4G22495 | AT3G24830 | 0.32632770 | undirected | NA | NA |
| ## | 2788 | AT4G22495 | AT1G48920 | 0.25011537 | undirected | NA | NA |
| ## | 2789 | AT4G22495 | AT3G08770 | 0.28808401 | undirected | NA | NA |
| ## | 2790 | AT4G22495 | AT3G05590 | 0.25395749 | undirected | NA | NA |
| ## | 2791 | AT4G22495 | AT4G38680 | 0.37756869 | undirected | NA | NA |
| ## | 2792 | AT4G22495 | AT3G04840 | 0.36362886 | undirected | NA | NA |
| ## | 2793 | AT4G22495 | AT2G28790 | 0.34513109 | undirected | NA | NA |
| ## | 2794 | AT4G22495 | AT1G70600 | 0.21862576 | undirected | NA | NA |
| ## | 2795 | AT4G22495 | AT4G27090 | 0.37698285 | undirected | NA | NA |
| ## | 2796 | AT4G22495 | AT1G77510 | 0.23699545 | undirected | NA | NA |
| ## | 2797 | AT4G22495 | AT1G70830 | 0.19295736 | undirected | NA | NA |
| ## | 2798 | AT4G22495 | AT1G15690 | 0.08944906 | undirected | NA | NA |
| ## | 2799 | AT4G22495 | AT3G52590 | 0.11517162 | undirected | NA | NA |
| ## | 2800 | AT4G22495 | AT5G07090 | 0.16008368 | undirected | NA | NA |
| ## | 2801 | AT4G22495 | AT5G17920 | 0.24621128 | undirected | NA | NA |
| ## | 2802 | AT4G22495 | AT5G56030 | 0.27387951 | undirected | NA | NA |
| ## | 2803 | AT4G22495 | AT2G41840 | 0.43495732 | undirected | NA | NA |
| ## | 2804 | AT4G22495 | AT3G60245 | 0.23444651 | undirected | NA | NA |
| ## | 2805 | AT4G22495 | AT2G08665 | 0.15620635 | undirected | NA | NA |
| ## | 2806 | AT4G22495 | AT3G26520 | 0.10109696 | undirected | NA | NA |
| ## | 2807 | AT4G22495 | AT2G42840 | 0.35484314 | undirected | NA | NA |
| ## | 2808 | AT4G22495 | AT1G72370 | 0.30626681 | undirected | NA | NA |
| ## | 2809 | AT4G22495 | AT2G05520 | 0.36930459 | undirected | NA | NA |
| ## | 2810 | AT4G22495 | AT4G22513 | 0.31837857 | undirected | NA | NA |
| ## | 2811 | AT4G22495 | AT4G22530 | 0.35815873 | undirected | NA | NA |
| ## | 2812 | AT4G22495 | ATCG01210 | 0.39756621 | undirected | NA | NA |
| ## | 2813 | AT4G22495 | AT3G25520 | 0.19650072 | undirected | NA | NA |
| ## | 2814 | AT3G09200 | AT1G14320 | 0.14613201 | undirected | NA | NA |
| ## | 2815 | AT3G09200 | AT1G13930 | 0.18135519 | undirected | NA | NA |
| ## | 2816 | AT3G09200 | AT2G36530 | 0.09527814 | undirected | NA | NA |
| ## | 2817 | AT3G09200 | AT3G49910 | 0.12935291 | undirected | NA | NA |
| ## | 2818 | AT3G09200 | AT2G34480 | 0.25193051 | undirected | NA | NA |
| ## | 2819 | AT3G09200 | AT5G02960 | 0.24613609 | undirected | NA | NA |
| ## | 2820 | AT3G09200 | AT2G18020 | 0.20833917 | undirected | NA | NA |
| ## | 2821 | AT3G09200 | AT1G13440 | 0.29051399 | undirected | NA | NA |
| ## | 2822 | AT3G09200 | AT2G16600 | 0.26592242 | undirected | NA | NA |
| ## | 2823 | AT3G09200 | AT1G07920 | 0.17895250 | undirected | NA | NA |
| ## | 2824 | AT3G09200 | AT1G04410 | 0.16031671 | undirected | NA | NA |
| ## | 2825 | AT3G09200 | AT2G36830 | 0.20426746 | undirected | NA | NA |
| ## | 2826 | AT3G09200 | AT3G15353 | 0.12265965 | undirected | NA | NA |
| ## | 2827 | AT3G09200 | AT1G62480 | 0.15893775 | undirected | NA | NA |
| ## | 2828 | AT3G09200 | AT5G38940 | 0.33233147 | undirected | NA | NA |
| ## | 2829 | AT3G09200 | ATCG01180 | 0.19943212 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2830 | AT3G09200 | AT1G07930 | 0.17407354 | undirected | NA | NA |
| ## | 2831 | AT3G09200 | ATCG00950 | 0.25564371 | undirected | NA | NA |
| ## | 2832 | AT3G09200 | AT3G13920 | 0.24205836 | undirected | NA | NA |
| ## | 2833 | AT3G09200 | AT1G28290 | 0.13743112 | undirected | NA | NA |
| ## | 2834 | AT3G09200 | AT1G04270 | 0.23285744 | undirected | NA | NA |
| ## | 2835 | AT3G09200 | AT4G35100 | 0.30909588 | undirected | NA | NA |
| ## | 2836 | AT3G09200 | AT5G48480 | 0.19508832 | undirected | NA | NA |
| ## | 2837 | AT3G09200 | AT1G52400 | 0.14721603 | undirected | NA | NA |
| ## | 2838 | AT3G09200 | AT3G02470 | 0.08810728 | undirected | NA | NA |
| ## | 2839 | AT3G09200 | AT5G15200 | 0.35627710 | undirected | NA | NA |
| ## | 2840 | AT3G09200 | AT5G48485 | 0.17542694 | undirected | NA | NA |
| ## | 2841 | AT3G09200 | AT1G20620 | 0.18498111 | undirected | NA | NA |
| ## | 2842 | AT3G09200 | AT2G27720 | 0.17146981 | undirected | NA | NA |
| ## | 2843 | AT3G09200 | AT5G02870 | 0.19935689 | undirected | NA | NA |
| ## | 2844 | AT3G09200 | AT4G15000 | 0.32155253 | undirected | NA | NA |
| ## | 2845 | AT3G09200 | AT5G20290 | 0.11720232 | undirected | NA | NA |
| ## | 2846 | AT3G09200 | AT4G31700 | 0.11976610 | undirected | NA | NA |
| ## | 2847 | AT3G09200 | AT3G04400 | 0.05414483 | undirected | NA | NA |
| ## | 2848 | AT3G09200 | AT3G02230 | 0.26340658 | undirected | NA | NA |
| ## | 2849 | AT3G09200 | AT1G54410 | 0.29978756 | undirected | NA | NA |
| ## | 2850 | AT3G09200 | AT3G24830 | 0.32576800 | undirected | NA | NA |
| ## | 2851 | AT3G09200 | AT1G48920 | 0.05708651 | undirected | NA | NA |
| ## | 2852 | AT3G09200 | AT3G08770 | 0.20327055 | undirected | NA | NA |
| ## | 2853 | AT3G09200 | AT3G05590 | 0.34347917 | undirected | NA | NA |
| ## | 2854 | AT3G09200 | AT4G38680 | 0.20716778 | undirected | NA | NA |
| ## | 2855 | AT3G09200 | AT3G04840 | 0.12685916 | undirected | NA | NA |
| ## | 2856 | AT3G09200 | AT2G28790 | 0.10351616 | undirected | NA | NA |
| ## | 2857 | AT3G09200 | AT1G70600 | 0.22227737 | undirected | NA | NA |
| ## | 2858 | AT3G09200 | AT4G27090 | 0.23145059 | undirected | NA | NA |
| ## | 2859 | AT3G09200 | AT1G77510 | 0.15723451 | undirected | NA | NA |
| ## | 2860 | AT3G09200 | AT1G70830 | 0.07987031 | undirected | NA | NA |
| ## | 2861 | AT3G09200 | AT1G15690 | 0.15829572 | undirected | NA | NA |
| ## | 2862 | AT3G09200 | AT3G52590 | 0.08321609 | undirected | NA | NA |
| ## | 2863 | AT3G09200 | AT5G07090 | 0.24386423 | undirected | NA | NA |
| ## | 2864 | AT3G09200 | AT5G17920 | 0.05507052 | undirected | NA | NA |
| ## | 2865 | AT3G09200 | AT5G56030 | 0.27700399 | undirected | NA | NA |
| ## | 2866 | AT3G09200 | AT2G41840 | 0.25005973 | undirected | NA | NA |
| ## | 2867 | AT3G09200 | AT3G60245 | 0.16628560 | undirected | NA | NA |
| ## | 2868 | AT3G09200 | AT2G08665 | 0.14758427 | undirected | NA | NA |
| ## | 2869 | AT3G09200 | AT3G26520 | 0.02044705 | undirected | NA | NA |
| ## | 2870 | AT3G09200 | AT2G42840 | 0.16357608 | undirected | NA | NA |
| ## | 2871 | AT3G09200 | AT1G72370 | 0.12055924 | undirected | NA | NA |
| ## | 2872 | AT3G09200 | AT2G05520 | 0.31439886 | undirected | NA | NA |
| ## | 2873 | AT3G09200 | AT4G22513 | 0.29257245 | undirected | NA | NA |
| ## | 2874 | AT3G09200 | AT4G22530 | 0.25596777 | undirected | NA | NA |
| ## | 2875 | AT3G09200 | ATCG01210 | 0.19909298 | undirected | NA | NA |
| ## | 2876 | AT3G09200 | AT3G25520 | 0.17300657 | undirected | NA | NA |
| ## | 2877 | AT1G14320 | AT1G13930 | 0.33784768 | undirected | NA | NA |
| ## | 2878 | AT1G14320 | AT2G36530 | 0.31022077 | undirected | NA | NA |
| ## | 2879 | AT1G14320 | AT3G49910 | 0.38276670 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2880 | AT1G14320 | AT2G34480 | 0.31661567 | undirected | NA | NA |
| ## | 2881 | AT1G14320 | AT5G02960 | 0.23642253 | undirected | NA | NA |
| ## | 2882 | AT1G14320 | AT2G18020 | 0.22405653 | undirected | NA | NA |
| ## | 2883 | AT1G14320 | AT1G13440 | 0.27686130 | undirected | NA | NA |
| ## | 2884 | AT1G14320 | AT2G16600 | 0.31614825 | undirected | NA | NA |
| ## | 2885 | AT1G14320 | AT1G07920 | 0.08706595 | undirected | NA | NA |
| ## | 2886 | AT1G14320 | AT1G04410 | 0.24476983 | undirected | NA | NA |
| ## | 2887 | AT1G14320 | AT2G36830 | 0.24871835 | undirected | NA | NA |
| ## | 2888 | AT1G14320 | AT3G15353 | 0.33260668 | undirected | NA | NA |
| ## | 2889 | AT1G14320 | AT1G62480 | 0.35244187 | undirected | NA | NA |
| ## | 2890 | AT1G14320 | AT5G38940 | 0.22902255 | undirected | NA | NA |
| ## | 2891 | AT1G14320 | ATCG01180 | 0.29895988 | undirected | NA | NA |
| ## | 2892 | AT1G14320 | AT1G07930 | 0.14412738 | undirected | NA | NA |
| ## | 2893 | AT1G14320 | ATCG00950 | 0.41725127 | undirected | NA | NA |
| ## | 2894 | AT1G14320 | AT3G13920 | 0.18854646 | undirected | NA | NA |
| ## | 2895 | AT1G14320 | AT1G28290 | 0.14188960 | undirected | NA | NA |
| ## | 2896 | AT1G14320 | AT1G04270 | 0.31954360 | undirected | NA | NA |
| ## | 2897 | AT1G14320 | AT4G35100 | 0.39202835 | undirected | NA | NA |
| ## | 2898 | AT1G14320 | AT5G48480 | 0.28649887 | undirected | NA | NA |
| ## | 2899 | AT1G14320 | AT1G52400 | 0.09593542 | undirected | NA | NA |
| ## | 2900 | AT1G14320 | AT3G02470 | 0.27310400 | undirected | NA | NA |
| ## | 2901 | AT1G14320 | AT5G15200 | 0.29909023 | undirected | NA | NA |
| ## | 2902 | AT1G14320 | AT5G48485 | 0.40348608 | undirected | NA | NA |
| ## | 2903 | AT1G14320 | AT1G20620 | 0.22285248 | undirected | NA | NA |
| ## | 2904 | AT1G14320 | AT2G27720 | 0.33586735 | undirected | NA | NA |
| ## | 2905 | AT1G14320 | AT5G02870 | 0.12743099 | undirected | NA | NA |
| ## | 2906 | AT1G14320 | AT4G15000 | 0.32067066 | undirected | NA | NA |
| ## | 2907 | AT1G14320 | AT5G20290 | 0.12813653 | undirected | NA | NA |
| ## | 2908 | AT1G14320 | AT4G31700 | 0.04256250 | undirected | NA | NA |
| ## | 2909 | AT1G14320 | AT3G04400 | 0.22865821 | undirected | NA | NA |
| ## | 2910 | AT1G14320 | AT3G02230 | 0.19088676 | undirected | NA | NA |
| ## | 2911 | AT1G14320 | AT1G54410 | 0.37103105 | undirected | NA | NA |
| ## | 2912 | AT1G14320 | AT3G24830 | 0.30817434 | undirected | NA | NA |
| ## | 2913 | AT1G14320 | AT1G48920 | 0.25037390 | undirected | NA | NA |
| ## | 2914 | AT1G14320 | AT3G08770 | 0.25731148 | undirected | NA | NA |
| ## | 2915 | AT1G14320 | AT3G05590 | 0.21076060 | undirected | NA | NA |
| ## | 2916 | AT1G14320 | AT4G38680 | 0.37215683 | undirected | NA | NA |
| ## | 2917 | AT1G14320 | AT3G04840 | 0.34232269 | undirected | NA | NA |
| ## | 2918 | AT1G14320 | AT2G28790 | 0.33415420 | undirected | NA | NA |
| ## | 2919 | AT1G14320 | AT1G70600 | 0.18649363 | undirected | NA | NA |
| ## | 2920 | AT1G14320 | AT4G27090 | 0.36489738 | undirected | NA | NA |
| ## | 2921 | AT1G14320 | AT1G77510 | 0.20856272 | undirected | NA | NA |
| ## | 2922 | AT1G14320 | AT1G70830 | 0.20381314 | undirected | NA | NA |
| ## | 2923 | AT1G14320 | AT1G15690 | 0.06625377 | undirected | NA | NA |
| ## | 2924 | AT1G14320 | AT3G52590 | 0.13087798 | undirected | NA | NA |
| ## | 2925 | AT1G14320 | AT5G07090 | 0.13115470 | undirected | NA | NA |
| ## | 2926 | AT1G14320 | AT5G17920 | 0.27053759 | undirected | NA | NA |
| ## | 2927 | AT1G14320 | AT5G56030 | 0.23463273 | undirected | NA | NA |
| ## | 2928 | AT1G14320 | AT2G41840 | 0.46118901 | undirected | NA | NA |
| ## | 2929 | AT1G14320 | AT3G60245 | 0.20229767 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2930 | AT1G14320 | AT2G08665 | 0.11996257 | undirected | NA | NA |
| ## | 2931 | AT1G14320 | AT3G26520 | 0.12465290 | undirected | NA | NA |
| ## | 2932 | AT1G14320 | AT2G42840 | 0.34548501 | undirected | NA | NA |
| ## | 2933 | AT1G14320 | AT1G72370 | 0.26703464 | undirected | NA | NA |
| ## | 2934 | AT1G14320 | AT2G05520 | 0.34117050 | undirected | NA | NA |
| ## | 2935 | AT1G14320 | AT4G22513 | 0.29537849 | undirected | NA | NA |
| ## | 2936 | AT1G14320 | AT4G22530 | 0.35002331 | undirected | NA | NA |
| ## | 2937 | AT1G14320 | ATCG01210 | 0.42360123 | undirected | NA | NA |
| ## | 2938 | AT1G14320 | AT3G25520 | 0.15309038 | undirected | NA | NA |
| ## | 2939 | AT1G13930 | AT2G36530 | 0.17776184 | undirected | NA | NA |
| ## | 2940 | AT1G13930 | AT3G49910 | 0.33726055 | undirected | NA | NA |
| ## | 2941 | AT1G13930 | AT2G34480 | 0.27657803 | undirected | NA | NA |
| ## | 2942 | AT1G13930 | AT5G02960 | 0.24677369 | undirected | NA | NA |
| ## | 2943 | AT1G13930 | AT2G18020 | 0.22188099 | undirected | NA | NA |
| ## | 2944 | AT1G13930 | AT1G13440 | 0.29418350 | undirected | NA | NA |
| ## | 2945 | AT1G13930 | AT2G16600 | 0.31272001 | undirected | NA | NA |
| ## | 2946 | AT1G13930 | AT1G07920 | 0.14375436 | undirected | NA | NA |
| ## | 2947 | AT1G13930 | AT1G04410 | 0.21748746 | undirected | NA | NA |
| ## | 2948 | AT1G13930 | AT2G36830 | 0.27229257 | undirected | NA | NA |
| ## | 2949 | AT1G13930 | AT3G15353 | 0.22003709 | undirected | NA | NA |
| ## | 2950 | AT1G13930 | AT1G62480 | 0.35594616 | undirected | NA | NA |
| ## | 2951 | AT1G13930 | AT5G38940 | 0.28340246 | undirected | NA | NA |
| ## | 2952 | AT1G13930 | ATCG01180 | 0.29221790 | undirected | NA | NA |
| ## | 2953 | AT1G13930 | AT1G07930 | 0.23788672 | undirected | NA | NA |
| ## | 2954 | AT1G13930 | ATCG00950 | 0.34629470 | undirected | NA | NA |
| ## | 2955 | AT1G13930 | AT3G13920 | 0.21743650 | undirected | NA | NA |
| ## | 2956 | AT1G13930 | AT1G28290 | 0.21113050 | undirected | NA | NA |
| ## | 2957 | AT1G13930 | AT1G04270 | 0.29714101 | undirected | NA | NA |
| ## | 2958 | AT1G13930 | AT4G35100 | 0.39139921 | undirected | NA | NA |
| ## | 2959 | AT1G13930 | AT5G48480 | 0.29192969 | undirected | NA | NA |
| ## | 2960 | AT1G13930 | AT1G52400 | 0.13990253 | undirected | NA | NA |
| ## | 2961 | AT1G13930 | AT3G02470 | 0.18312004 | undirected | NA | NA |
| ## | 2962 | AT1G13930 | AT5G15200 | 0.35720950 | undirected | NA | NA |
| ## | 2963 | AT1G13930 | AT5G48485 | 0.34327286 | undirected | NA | NA |
| ## | 2964 | AT1G13930 | AT1G20620 | 0.26651509 | undirected | NA | NA |
| ## | 2965 | AT1G13930 | AT2G27720 | 0.31378543 | undirected | NA | NA |
| ## | 2966 | AT1G13930 | AT5G02870 | 0.15851393 | undirected | NA | NA |
| ## | 2967 | AT1G13930 | AT4G15000 | 0.34213525 | undirected | NA | NA |
| ## | 2968 | AT1G13930 | AT5G20290 | 0.13427307 | undirected | NA | NA |
| ## | 2969 | AT1G13930 | AT4G31700 | 0.12175157 | undirected | NA | NA |
| ## | 2970 | AT1G13930 | AT3G04400 | 0.17111515 | undirected | NA | NA |
| ## | 2971 | AT1G13930 | AT3G02230 | 0.21546698 | undirected | NA | NA |
| ## | 2972 | AT1G13930 | AT1G54410 | 0.35784053 | undirected | NA | NA |
| ## | 2973 | AT1G13930 | AT3G24830 | 0.34511056 | undirected | NA | NA |
| ## | 2974 | AT1G13930 | AT1G48920 | 0.14301732 | undirected | NA | NA |
| ## | 2975 | AT1G13930 | AT3G08770 | 0.28010149 | undirected | NA | NA |
| ## | 2976 | AT1G13930 | AT3G05590 | 0.30369234 | undirected | NA | NA |
| ## | 2977 | AT1G13930 | AT4G38680 | 0.31698061 | undirected | NA | NA |
| ## | 2978 | AT1G13930 | AT3G04840 | 0.36277992 | undirected | NA | NA |
| ## | 2979 | AT1G13930 | AT2G28790 | 0.23518268 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 2980 | AT1G13930 | AT1G70600 | 0.21194362 | undirected | NA | NA |
| ## | 2981 | AT1G13930 | AT4G27090 | 0.29842000 | undirected | NA | NA |
| ## | 2982 | AT1G13930 | AT1G77510 | 0.27161681 | undirected | NA | NA |
| ## | 2983 | AT1G13930 | AT1G70830 | 0.17394214 | undirected | NA | NA |
| ## | 2984 | AT1G13930 | AT1G15690 | 0.12688249 | undirected | NA | NA |
| ## | 2985 | AT1G13930 | AT3G52590 | 0.11899473 | undirected | NA | NA |
| ## | 2986 | AT1G13930 | AT5G07090 | 0.18184906 | undirected | NA | NA |
| ## | 2987 | AT1G13930 | AT5G17920 | 0.21401636 | undirected | NA | NA |
| ## | 2988 | AT1G13930 | AT5G56030 | 0.27252047 | undirected | NA | NA |
| ## | 2989 | AT1G13930 | AT2G41840 | 0.38127552 | undirected | NA | NA |
| ## | 2990 | AT1G13930 | AT3G60245 | 0.29081034 | undirected | NA | NA |
| ## | 2991 | AT1G13930 | AT2G08665 | 0.21118482 | undirected | NA | NA |
| ## | 2992 | AT1G13930 | AT3G26520 | 0.04355558 | undirected | NA | NA |
| ## | 2993 | AT1G13930 | AT2G42840 | 0.33711738 | undirected | NA | NA |
| ## | 2994 | AT1G13930 | AT1G72370 | 0.19357640 | undirected | NA | NA |
| ## | 2995 | AT1G13930 | AT2G05520 | 0.33395461 | undirected | NA | NA |
| ## | 2996 | AT1G13930 | AT4G22513 | 0.32021130 | undirected | NA | NA |
| ## | 2997 | AT1G13930 | AT4G22530 | 0.29400130 | undirected | NA | NA |
| ## | 2998 | AT1G13930 | ATCG01210 | 0.31759266 | undirected | NA | NA |
| ## | 2999 | AT1G13930 | AT3G25520 | 0.24177199 | undirected | NA | NA |
| ## | 3000 | AT2G36530 | AT3G49910 | 0.27343288 | undirected | NA | NA |
| ## | 3001 | AT2G36530 | AT2G34480 | 0.25567913 | undirected | NA | NA |
| ## | 3002 | AT2G36530 | AT5G02960 | 0.12268335 | undirected | NA | NA |
| ## | 3003 | AT2G36530 | AT2G18020 | 0.13525879 | undirected | NA | NA |
| ## | 3004 | AT2G36530 | AT1G13440 | 0.18173933 | undirected | NA | NA |
| ## | 3005 | AT2G36530 | AT2G16600 | 0.13972860 | undirected | NA | NA |
| ## | 3006 | AT2G36530 | AT1G07920 | 0.04612385 | undirected | NA | NA |
| ## | 3007 | AT2G36530 | AT1G04410 | 0.27531616 | undirected | NA | NA |
| ## | 3008 | AT2G36530 | AT2G36830 | 0.13947834 | undirected | NA | NA |
| ## | 3009 | AT2G36530 | AT3G15353 | 0.31465439 | undirected | NA | NA |
| ## | 3010 | AT2G36530 | AT1G62480 | 0.32960351 | undirected | NA | NA |
| ## | 3011 | AT2G36530 | AT5G38940 | 0.11027029 | undirected | NA | NA |
| ## | 3012 | AT2G36530 | ATCG01180 | 0.25710296 | undirected | NA | NA |
| ## | 3013 | AT2G36530 | AT1G07930 | 0.13448538 | undirected | NA | NA |
| ## | 3014 | AT2G36530 | ATCG00950 | 0.26377064 | undirected | NA | NA |
| ## | 3015 | AT2G36530 | AT3G13920 | 0.08250701 | undirected | NA | NA |
| ## | 3016 | AT2G36530 | AT1G28290 | 0.05969588 | undirected | NA | NA |
| ## | 3017 | AT2G36530 | AT1G04270 | 0.21537483 | undirected | NA | NA |
| ## | 3018 | AT2G36530 | AT4G35100 | 0.20863789 | undirected | NA | NA |
| ## | 3019 | AT2G36530 | AT5G48480 | 0.17986804 | undirected | NA | NA |
| ## | 3020 | AT2G36530 | AT1G52400 | 0.03174413 | undirected | NA | NA |
| ## | 3021 | AT2G36530 | AT3G02470 | 0.12448805 | undirected | NA | NA |
| ## | 3022 | AT2G36530 | AT5G15200 | 0.13924756 | undirected | NA | NA |
| ## | 3023 | AT2G36530 | AT5G48485 | 0.29656387 | undirected | NA | NA |
| ## | 3024 | AT2G36530 | AT1G20620 | 0.14807730 | undirected | NA | NA |
| ## | 3025 | AT2G36530 | AT2G27720 | 0.20192824 | undirected | NA | NA |
| ## | 3026 | AT2G36530 | AT5G02870 | 0.05539599 | undirected | NA | NA |
| ## | 3027 | AT2G36530 | AT4G15000 | 0.18452968 | undirected | NA | NA |
| ## | 3028 | AT2G36530 | AT5G20290 | 0.14004762 | undirected | NA | NA |
| ## | 3029 | AT2G36530 | AT4G31700 | 0.02336537 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3030 | AT2G36530 | AT3G04400 | 0.20479473 | undirected | NA | NA |
| ## | 3031 | AT2G36530 | AT3G02230 | 0.09924516 | undirected | NA | NA |
| ## | 3032 | AT2G36530 | AT1G54410 | 0.22304518 | undirected | NA | NA |
| ## | 3033 | AT2G36530 | AT3G24830 | 0.12834931 | undirected | NA | NA |
| ## | 3034 | AT2G36530 | AT1G48920 | 0.25106525 | undirected | NA | NA |
| ## | 3035 | AT2G36530 | AT3G08770 | 0.25705883 | undirected | NA | NA |
| ## | 3036 | AT2G36530 | AT3G05590 | 0.08348266 | undirected | NA | NA |
| ## | 3037 | AT2G36530 | AT4G38680 | 0.28868470 | undirected | NA | NA |
| ## | 3038 | AT2G36530 | AT3G04840 | 0.25759728 | undirected | NA | NA |
| ## | 3039 | AT2G36530 | AT2G28790 | 0.22661908 | undirected | NA | NA |
| ## | 3040 | AT2G36530 | AT1G70600 | 0.09982652 | undirected | NA | NA |
| ## | 3041 | AT2G36530 | AT4G27090 | 0.29391178 | undirected | NA | NA |
| ## | 3042 | AT2G36530 | AT1G77510 | 0.12053818 | undirected | NA | NA |
| ## | 3043 | AT2G36530 | AT1G70830 | 0.05693422 | undirected | NA | NA |
| ## | 3044 | AT2G36530 | AT1G15690 | 0.02991875 | undirected | NA | NA |
| ## | 3045 | AT2G36530 | AT3G52590 | 0.02146856 | undirected | NA | NA |
| ## | 3046 | AT2G36530 | AT5G07090 | 0.05181996 | undirected | NA | NA |
| ## | 3047 | AT2G36530 | AT5G17920 | 0.09699279 | undirected | NA | NA |
| ## | 3048 | AT2G36530 | AT5G56030 | 0.12940870 | undirected | NA | NA |
| ## | 3049 | AT2G36530 | AT2G41840 | 0.23882704 | undirected | NA | NA |
| ## | 3050 | AT2G36530 | AT3G60245 | 0.14164020 | undirected | NA | NA |
| ## | 3051 | AT2G36530 | AT2G08665 | 0.04117923 | undirected | NA | NA |
| ## | 3052 | AT2G36530 | AT3G26520 | 0.10058494 | undirected | NA | NA |
| ## | 3053 | AT2G36530 | AT2G42840 | 0.35073371 | undirected | NA | NA |
| ## | 3054 | AT2G36530 | AT1G72370 | 0.24209365 | undirected | NA | NA |
| ## | 3055 | AT2G36530 | AT2G05520 | 0.20026494 | undirected | NA | NA |
| ## | 3056 | AT2G36530 | AT4G22513 | 0.14115645 | undirected | NA | NA |
| ## | 3057 | AT2G36530 | AT4G22530 | 0.23474572 | undirected | NA | NA |
| ## | 3058 | AT2G36530 | ATCG01210 | 0.27797202 | undirected | NA | NA |
| ## | 3059 | AT2G36530 | AT3G25520 | 0.07331587 | undirected | NA | NA |
| ## | 3060 | AT3G49910 | AT2G34480 | 0.27841707 | undirected | NA | NA |
| ## | 3061 | AT3G49910 | AT5G02960 | 0.23757784 | undirected | NA | NA |
| ## | 3062 | AT3G49910 | AT2G18020 | 0.20136097 | undirected | NA | NA |
| ## | 3063 | AT3G49910 | AT1G13440 | 0.24294531 | undirected | NA | NA |
| ## | 3064 | AT3G49910 | AT2G16600 | 0.31931719 | undirected | NA | NA |
| ## | 3065 | AT3G49910 | AT1G07920 | 0.07378732 | undirected | NA | NA |
| ## | 3066 | AT3G49910 | AT1G04410 | 0.21262004 | undirected | NA | NA |
| ## | 3067 | AT3G49910 | AT2G36830 | 0.23811571 | undirected | NA | NA |
| ## | 3068 | AT3G49910 | AT3G15353 | 0.30060995 | undirected | NA | NA |
| ## | 3069 | AT3G49910 | AT1G62480 | 0.36375878 | undirected | NA | NA |
| ## | 3070 | AT3G49910 | AT5G38940 | 0.21105014 | undirected | NA | NA |
| ## | 3071 | AT3G49910 | ATCG01180 | 0.26132438 | undirected | NA | NA |
| ## | 3072 | AT3G49910 | AT1G07930 | 0.14058048 | undirected | NA | NA |
| ## | 3073 | AT3G49910 | ATCG00950 | 0.41283384 | undirected | NA | NA |
| ## | 3074 | AT3G49910 | AT3G13920 | 0.19407313 | undirected | NA | NA |
| ## | 3075 | AT3G49910 | AT1G28290 | 0.16231249 | undirected | NA | NA |
| ## | 3076 | AT3G49910 | AT1G04270 | 0.29336789 | undirected | NA | NA |
| ## | 3077 | AT3G49910 | AT4G35100 | 0.37356402 | undirected | NA | NA |
| ## | 3078 | AT3G49910 | AT5G48480 | 0.26799312 | undirected | NA | NA |
| ## | 3079 | AT3G49910 | AT1G52400 | 0.11001368 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3080 | AT3G49910 | AT3G02470 | 0.29289314 | undirected | NA | NA |
| ## | 3081 | AT3G49910 | AT5G15200 | 0.28302015 | undirected | NA | NA |
| ## | 3082 | AT3G49910 | AT5G48485 | 0.39245453 | undirected | NA | NA |
| ## | 3083 | AT3G49910 | AT1G20620 | 0.20213987 | undirected | NA | NA |
| ## | 3084 | AT3G49910 | AT2G27720 | 0.34730638 | undirected | NA | NA |
| ## | 3085 | AT3G49910 | AT5G02870 | 0.12859848 | undirected | NA | NA |
| ## | 3086 | AT3G49910 | AT4G15000 | 0.29315933 | undirected | NA | NA |
| ## | 3087 | AT3G49910 | AT5G20290 | 0.09806103 | undirected | NA | NA |
| ## | 3088 | AT3G49910 | AT4G31700 | 0.04324212 | undirected | NA | NA |
| ## | 3089 | AT3G49910 | AT3G04400 | 0.21089044 | undirected | NA | NA |
| ## | 3090 | AT3G49910 | AT3G02230 | 0.17078878 | undirected | NA | NA |
| ## | 3091 | AT3G49910 | AT1G54410 | 0.34899167 | undirected | NA | NA |
| ## | 3092 | AT3G49910 | AT3G24830 | 0.30181220 | undirected | NA | NA |
| ## | 3093 | AT3G49910 | AT1G48920 | 0.21353439 | undirected | NA | NA |
| ## | 3094 | AT3G49910 | AT3G08770 | 0.26203967 | undirected | NA | NA |
| ## | 3095 | AT3G49910 | AT3G05590 | 0.19818029 | undirected | NA | NA |
| ## | 3096 | AT3G49910 | AT4G38680 | 0.34144237 | undirected | NA | NA |
| ## | 3097 | AT3G49910 | AT3G04840 | 0.42127322 | undirected | NA | NA |
| ## | 3098 | AT3G49910 | AT2G28790 | 0.33014403 | undirected | NA | NA |
| ## | 3099 | AT3G49910 | AT1G70600 | 0.17604552 | undirected | NA | NA |
| ## | 3100 | AT3G49910 | AT4G27090 | 0.32530284 | undirected | NA | NA |
| ## | 3101 | AT3G49910 | AT1G77510 | 0.19210733 | undirected | NA | NA |
| ## | 3102 | AT3G49910 | AT1G70830 | 0.24083316 | undirected | NA | NA |
| ## | 3103 | AT3G49910 | AT1G15690 | 0.08019180 | undirected | NA | NA |
| ## | 3104 | AT3G49910 | AT3G52590 | 0.17227125 | undirected | NA | NA |
| ## | 3105 | AT3G49910 | AT5G07090 | 0.12990123 | undirected | NA | NA |
| ## | 3106 | AT3G49910 | AT5G17920 | 0.31478779 | undirected | NA | NA |
| ## | 3107 | AT3G49910 | AT5G56030 | 0.20716654 | undirected | NA | NA |
| ## | 3108 | AT3G49910 | AT2G41840 | 0.47503863 | undirected | NA | NA |
| ## | 3109 | AT3G49910 | AT3G60245 | 0.19403039 | undirected | NA | NA |
| ## | 3110 | AT3G49910 | AT2G08665 | 0.14359859 | undirected | NA | NA |
| ## | 3111 | AT3G49910 | AT3G26520 | 0.13273550 | undirected | NA | NA |
| ## | 3112 | AT3G49910 | AT2G42840 | 0.36541687 | undirected | NA | NA |
| ## | 3113 | AT3G49910 | AT1G72370 | 0.22316806 | undirected | NA | NA |
| ## | 3114 | AT3G49910 | AT2G05520 | 0.31460126 | undirected | NA | NA |
| ## | 3115 | AT3G49910 | AT4G22513 | 0.27753414 | undirected | NA | NA |
| ## | 3116 | AT3G49910 | AT4G22530 | 0.33509136 | undirected | NA | NA |
| ## | 3117 | AT3G49910 | ATCG01210 | 0.42803030 | undirected | NA | NA |
| ## | 3118 | AT3G49910 | AT3G25520 | 0.19124304 | undirected | NA | NA |
| ## | 3119 | AT2G34480 | AT5G02960 | 0.27954594 | undirected | NA | NA |
| ## | 3120 | AT2G34480 | AT2G18020 | 0.24619245 | undirected | NA | NA |
| ## | 3121 | AT2G34480 | AT1G13440 | 0.34757636 | undirected | NA | NA |
| ## | 3122 | AT2G34480 | AT2G16600 | 0.30086639 | undirected | NA | NA |
| ## | 3123 | AT2G34480 | AT1G07920 | 0.18645434 | undirected | NA | NA |
| ## | 3124 | AT2G34480 | AT1G04410 | 0.31563805 | undirected | NA | NA |
| ## | 3125 | AT2G34480 | AT2G36830 | 0.27707660 | undirected | NA | NA |
| ## | 3126 | AT2G34480 | AT3G15353 | 0.30849279 | undirected | NA | NA |
| ## | 3127 | AT2G34480 | AT1G62480 | 0.34200293 | undirected | NA | NA |
| ## | 3128 | AT2G34480 | AT5G38940 | 0.33645536 | undirected | NA | NA |
| ## | 3129 | AT2G34480 | ATCG01180 | 0.33059639 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3130 | AT2G34480 | AT1G07930 | 0.28564538 | undirected | NA | NA |
| ## | 3131 | AT2G34480 | ATCG00950 | 0.34918199 | undirected | NA | NA |
| ## | 3132 | AT2G34480 | AT3G13920 | 0.25593134 | undirected | NA | NA |
| ## | 3133 | AT2G34480 | AT1G28290 | 0.21459812 | undirected | NA | NA |
| ## | 3134 | AT2G34480 | AT1G04270 | 0.31253561 | undirected | NA | NA |
| ## | 3135 | AT2G34480 | AT4G35100 | 0.38117497 | undirected | NA | NA |
| ## | 3136 | AT2G34480 | AT5G48480 | 0.30298908 | undirected | NA | NA |
| ## | 3137 | AT2G34480 | AT1G52400 | 0.17395773 | undirected | NA | NA |
| ## | 3138 | AT2G34480 | AT3G02470 | 0.18658198 | undirected | NA | NA |
| ## | 3139 | AT2G34480 | AT5G15200 | 0.38704084 | undirected | NA | NA |
| ## | 3140 | AT2G34480 | AT5G48485 | 0.32361734 | undirected | NA | NA |
| ## | 3141 | AT2G34480 | AT1G20620 | 0.29828026 | undirected | NA | NA |
| ## | 3142 | AT2G34480 | AT2G27720 | 0.30492524 | undirected | NA | NA |
| ## | 3143 | AT2G34480 | AT5G02870 | 0.20381883 | undirected | NA | NA |
| ## | 3144 | AT2G34480 | AT4G15000 | 0.38090308 | undirected | NA | NA |
| ## | 3145 | AT2G34480 | AT5G20290 | 0.20297514 | undirected | NA | NA |
| ## | 3146 | AT2G34480 | AT4G31700 | 0.16295371 | undirected | NA | NA |
| ## | 3147 | AT2G34480 | AT3G04400 | 0.17558015 | undirected | NA | NA |
| ## | 3148 | AT2G34480 | AT3G02230 | 0.25118200 | undirected | NA | NA |
| ## | 3149 | AT2G34480 | AT1G54410 | 0.37828876 | undirected | NA | NA |
| ## | 3150 | AT2G34480 | AT3G24830 | 0.34289971 | undirected | NA | NA |
| ## | 3151 | AT2G34480 | AT1G48920 | 0.18825645 | undirected | NA | NA |
| ## | 3152 | AT2G34480 | AT3G08770 | 0.35868991 | undirected | NA | NA |
| ## | 3153 | AT2G34480 | AT3G05590 | 0.33709321 | undirected | NA | NA |
| ## | 3154 | AT2G34480 | AT4G38680 | 0.33600755 | undirected | NA | NA |
| ## | 3155 | AT2G34480 | AT3G04840 | 0.30693432 | undirected | NA | NA |
| ## | 3156 | AT2G34480 | AT2G28790 | 0.26643118 | undirected | NA | NA |
| ## | 3157 | AT2G34480 | AT1G70600 | 0.25736293 | undirected | NA | NA |
| ## | 3158 | AT2G34480 | AT4G27090 | 0.32659570 | undirected | NA | NA |
| ## | 3159 | AT2G34480 | AT1G77510 | 0.26228272 | undirected | NA | NA |
| ## | 3160 | AT2G34480 | AT1G70830 | 0.14456146 | undirected | NA | NA |
| ## | 3161 | AT2G34480 | AT1G15690 | 0.18784483 | undirected | NA | NA |
| ## | 3162 | AT2G34480 | AT3G52590 | 0.11329768 | undirected | NA | NA |
| ## | 3163 | AT2G34480 | AT5G07090 | 0.22658821 | undirected | NA | NA |
| ## | 3164 | AT2G34480 | AT5G17920 | 0.14595523 | undirected | NA | NA |
| ## | 3165 | AT2G34480 | AT5G56030 | 0.29461163 | undirected | NA | NA |
| ## | 3166 | AT2G34480 | AT2G41840 | 0.33702655 | undirected | NA | NA |
| ## | 3167 | AT2G34480 | AT3G60245 | 0.29935953 | undirected | NA | NA |
| ## | 3168 | AT2G34480 | AT2G08665 | 0.24782604 | undirected | NA | NA |
| ## | 3169 | AT2G34480 | AT3G26520 | 0.05527182 | undirected | NA | NA |
| ## | 3170 | AT2G34480 | AT2G42840 | 0.34506810 | undirected | NA | NA |
| ## | 3171 | AT2G34480 | AT1G72370 | 0.29733704 | undirected | NA | NA |
| ## | 3172 | AT2G34480 | AT2G05520 | 0.36354518 | undirected | NA | NA |
| ## | 3173 | AT2G34480 | AT4G22513 | 0.32802816 | undirected | NA | NA |
| ## | 3174 | AT2G34480 | AT4G22530 | 0.32343279 | undirected | NA | NA |
| ## | 3175 | AT2G34480 | ATCG01210 | 0.29911062 | undirected | NA | NA |
| ## | 3176 | AT2G34480 | AT3G25520 | 0.28097059 | undirected | NA | NA |
| ## | 3177 | AT5G02960 | AT2G18020 | 0.21545850 | undirected | NA | NA |
| ## | 3178 | AT5G02960 | AT1G13440 | 0.29468064 | undirected | NA | NA |
| ## | 3179 | AT5G02960 | AT2G16600 | 0.28146840 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3180 | AT5G02960 | AT1G07920 | 0.19021277 | undirected | NA | NA |
| ## | 3181 | AT5G02960 | AT1G04410 | 0.17958128 | undirected | NA | NA |
| ## | 3182 | AT5G02960 | AT2G36830 | 0.26905584 | undirected | NA | NA |
| ## | 3183 | AT5G02960 | AT3G15353 | 0.16050160 | undirected | NA | NA |
| ## | 3184 | AT5G02960 | AT1G62480 | 0.25485108 | undirected | NA | NA |
| ## | 3185 | AT5G02960 | AT5G38940 | 0.32123815 | undirected | NA | NA |
| ## | 3186 | AT5G02960 | ATCG01180 | 0.26281677 | undirected | NA | NA |
| ## | 3187 | AT5G02960 | AT1G07930 | 0.22693049 | undirected | NA | NA |
| ## | 3188 | AT5G02960 | ATCG00950 | 0.30282622 | undirected | NA | NA |
| ## | 3189 | AT5G02960 | AT3G13920 | 0.28262092 | undirected | NA | NA |
| ## | 3190 | AT5G02960 | AT1G28290 | 0.23446994 | undirected | NA | NA |
| ## | 3191 | AT5G02960 | AT1G04270 | 0.27022520 | undirected | NA | NA |
| ## | 3192 | AT5G02960 | AT4G35100 | 0.32572415 | undirected | NA | NA |
| ## | 3193 | AT5G02960 | AT5G48480 | 0.26895316 | undirected | NA | NA |
| ## | 3194 | AT5G02960 | AT1G52400 | 0.24294088 | undirected | NA | NA |
| ## | 3195 | AT5G02960 | AT3G02470 | 0.11818641 | undirected | NA | NA |
| ## | 3196 | AT5G02960 | AT5G15200 | 0.36427750 | undirected | NA | NA |
| ## | 3197 | AT5G02960 | AT5G48485 | 0.26911779 | undirected | NA | NA |
| ## | 3198 | AT5G02960 | AT1G20620 | 0.27255065 | undirected | NA | NA |
| ## | 3199 | AT5G02960 | AT2G27720 | 0.29270006 | undirected | NA | NA |
| ## | 3200 | AT5G02960 | AT5G02870 | 0.24485617 | undirected | NA | NA |
| ## | 3201 | AT5G02960 | AT4G15000 | 0.33252958 | undirected | NA | NA |
| ## | 3202 | AT5G02960 | AT5G20290 | 0.10621483 | undirected | NA | NA |
| ## | 3203 | AT5G02960 | AT4G31700 | 0.18122297 | undirected | NA | NA |
| ## | 3204 | AT5G02960 | AT3G04400 | 0.08723064 | undirected | NA | NA |
| ## | 3205 | AT5G02960 | AT3G02230 | 0.22263416 | undirected | NA | NA |
| ## | 3206 | AT5G02960 | AT1G54410 | 0.32614856 | undirected | NA | NA |
| ## | 3207 | AT5G02960 | AT3G24830 | 0.32249135 | undirected | NA | NA |
| ## | 3208 | AT5G02960 | AT1G48920 | 0.08172021 | undirected | NA | NA |
| ## | 3209 | AT5G02960 | AT3G08770 | 0.29070996 | undirected | NA | NA |
| ## | 3210 | AT5G02960 | AT3G05590 | 0.33798723 | undirected | NA | NA |
| ## | 3211 | AT5G02960 | AT4G38680 | 0.27231058 | undirected | NA | NA |
| ## | 3212 | AT5G02960 | AT3G04840 | 0.24235429 | undirected | NA | NA |
| ## | 3213 | AT5G02960 | AT2G28790 | 0.14717513 | undirected | NA | NA |
| ## | 3214 | AT5G02960 | AT1G70600 | 0.26648311 | undirected | NA | NA |
| ## | 3215 | AT5G02960 | AT4G27090 | 0.26334040 | undirected | NA | NA |
| ## | 3216 | AT5G02960 | AT1G77510 | 0.22896378 | undirected | NA | NA |
| ## | 3217 | AT5G02960 | AT1G70830 | 0.10927744 | undirected | NA | NA |
| ## | 3218 | AT5G02960 | AT1G15690 | 0.22084890 | undirected | NA | NA |
| ## | 3219 | AT5G02960 | AT3G52590 | 0.10809273 | undirected | NA | NA |
| ## | 3220 | AT5G02960 | AT5G07090 | 0.25415072 | undirected | NA | NA |
| ## | 3221 | AT5G02960 | AT5G17920 | 0.09617930 | undirected | NA | NA |
| ## | 3222 | AT5G02960 | AT5G56030 | 0.24825746 | undirected | NA | NA |
| ## | 3223 | AT5G02960 | AT2G41840 | 0.29607067 | undirected | NA | NA |
| ## | 3224 | AT5G02960 | AT3G60245 | 0.25547178 | undirected | NA | NA |
| ## | 3225 | AT5G02960 | AT2G08665 | 0.26215185 | undirected | NA | NA |
| ## | 3226 | AT5G02960 | AT3G26520 | 0.02964701 | undirected | NA | NA |
| ## | 3227 | AT5G02960 | AT2G42840 | 0.25723078 | undirected | NA | NA |
| ## | 3228 | AT5G02960 | AT1G72370 | 0.15144305 | undirected | NA | NA |
| ## | 3229 | AT5G02960 | AT2G05520 | 0.31001440 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3230 | AT5G02960 | AT4G22513 | 0.28617049 | undirected | NA | NA |
| ## | 3231 | AT5G02960 | AT4G22530 | 0.28112844 | undirected | NA | NA |
| ## | 3232 | AT5G02960 | ATCG01210 | 0.26729951 | undirected | NA | NA |
| ## | 3233 | AT5G02960 | AT3G25520 | 0.31443902 | undirected | NA | NA |
| ## | 3234 | AT2G18020 | AT1G13440 | 0.27916025 | undirected | NA | NA |
| ## | 3235 | AT2G18020 | AT2G16600 | 0.28229103 | undirected | NA | NA |
| ## | 3236 | AT2G18020 | AT1G07920 | 0.15469519 | undirected | NA | NA |
| ## | 3237 | AT2G18020 | AT1G04410 | 0.22550734 | undirected | NA | NA |
| ## | 3238 | AT2G18020 | AT2G36830 | 0.21108477 | undirected | NA | NA |
| ## | 3239 | AT2G18020 | AT3G15353 | 0.17428186 | undirected | NA | NA |
| ## | 3240 | AT2G18020 | AT1G62480 | 0.23812989 | undirected | NA | NA |
| ## | 3241 | AT2G18020 | AT5G38940 | 0.31075043 | undirected | NA | NA |
| ## | 3242 | AT2G18020 | ATCG01180 | 0.25381214 | undirected | NA | NA |
| ## | 3243 | AT2G18020 | AT1G07930 | 0.22345630 | undirected | NA | NA |
| ## | 3244 | AT2G18020 | ATCG00950 | 0.26023418 | undirected | NA | NA |
| ## | 3245 | AT2G18020 | AT3G13920 | 0.19424376 | undirected | NA | NA |
| ## | 3246 | AT2G18020 | AT1G28290 | 0.15868525 | undirected | NA | NA |
| ## | 3247 | AT2G18020 | AT1G04270 | 0.23953034 | undirected | NA | NA |
| ## | 3248 | AT2G18020 | AT4G35100 | 0.33355536 | undirected | NA | NA |
| ## | 3249 | AT2G18020 | AT5G48480 | 0.21782194 | undirected | NA | NA |
| ## | 3250 | AT2G18020 | AT1G52400 | 0.13360609 | undirected | NA | NA |
| ## | 3251 | AT2G18020 | AT3G02470 | 0.13963205 | undirected | NA | NA |
| ## | 3252 | AT2G18020 | AT5G15200 | 0.34782874 | undirected | NA | NA |
| ## | 3253 | AT2G18020 | AT5G48485 | 0.23305628 | undirected | NA | NA |
| ## | 3254 | AT2G18020 | AT1G20620 | 0.21401195 | undirected | NA | NA |
| ## | 3255 | AT2G18020 | AT2G27720 | 0.20334424 | undirected | NA | NA |
| ## | 3256 | AT2G18020 | AT5G02870 | 0.15497973 | undirected | NA | NA |
| ## | 3257 | AT2G18020 | AT4G15000 | 0.32153943 | undirected | NA | NA |
| ## | 3258 | AT2G18020 | AT5G20290 | 0.18994793 | undirected | NA | NA |
| ## | 3259 | AT2G18020 | AT4G31700 | 0.12034964 | undirected | NA | NA |
| ## | 3260 | AT2G18020 | AT3G04400 | 0.09299336 | undirected | NA | NA |
| ## | 3261 | AT2G18020 | AT3G02230 | 0.25041168 | undirected | NA | NA |
| ## | 3262 | AT2G18020 | AT1G54410 | 0.30602846 | undirected | NA | NA |
| ## | 3263 | AT2G18020 | AT3G24830 | 0.32718323 | undirected | NA | NA |
| ## | 3264 | AT2G18020 | AT1G48920 | 0.08727151 | undirected | NA | NA |
| ## | 3265 | AT2G18020 | AT3G08770 | 0.23791400 | undirected | NA | NA |
| ## | 3266 | AT2G18020 | AT3G05590 | 0.32467030 | undirected | NA | NA |
| ## | 3267 | AT2G18020 | AT4G38680 | 0.24452801 | undirected | NA | NA |
| ## | 3268 | AT2G18020 | AT3G04840 | 0.20089105 | undirected | NA | NA |
| ## | 3269 | AT2G18020 | AT2G28790 | 0.16751184 | undirected | NA | NA |
| ## | 3270 | AT2G18020 | AT1G70600 | 0.19763502 | undirected | NA | NA |
| ## | 3271 | AT2G18020 | AT4G27090 | 0.24888027 | undirected | NA | NA |
| ## | 3272 | AT2G18020 | AT1G77510 | 0.21732957 | undirected | NA | NA |
| ## | 3273 | AT2G18020 | AT1G70830 | 0.13827187 | undirected | NA | NA |
| ## | 3274 | AT2G18020 | AT1G15690 | 0.14764539 | undirected | NA | NA |
| ## | 3275 | AT2G18020 | AT3G52590 | 0.10487694 | undirected | NA | NA |
| ## | 3276 | AT2G18020 | AT5G07090 | 0.19781006 | undirected | NA | NA |
| ## | 3277 | AT2G18020 | AT5G17920 | 0.11788907 | undirected | NA | NA |
| ## | 3278 | AT2G18020 | AT5G56030 | 0.30152364 | undirected | NA | NA |
| ## | 3279 | AT2G18020 | AT2G41840 | 0.27594276 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3280 | AT2G18020 | AT3G60245 | 0.22379672 | undirected | NA | NA |
| ## | 3281 | AT2G18020 | AT2G08665 | 0.15085714 | undirected | NA | NA |
| ## | 3282 | AT2G18020 | AT3G26520 | 0.03014820 | undirected | NA | NA |
| ## | 3283 | AT2G18020 | AT2G42840 | 0.23567049 | undirected | NA | NA |
| ## | 3284 | AT2G18020 | AT1G72370 | 0.16017622 | undirected | NA | NA |
| ## | 3285 | AT2G18020 | AT2G05520 | 0.32318272 | undirected | NA | NA |
| ## | 3286 | AT2G18020 | AT4G22513 | 0.32062646 | undirected | NA | NA |
| ## | 3287 | AT2G18020 | AT4G22530 | 0.24462384 | undirected | NA | NA |
| ## | 3288 | AT2G18020 | ATCG01210 | 0.21735225 | undirected | NA | NA |
| ## | 3289 | AT2G18020 | AT3G25520 | 0.17947142 | undirected | NA | NA |
| ## | 3290 | AT1G13440 | AT2G16600 | 0.26839240 | undirected | NA | NA |
| ## | 3291 | AT1G13440 | AT1G07920 | 0.26214666 | undirected | NA | NA |
| ## | 3292 | AT1G13440 | AT1G04410 | 0.28312679 | undirected | NA | NA |
| ## | 3293 | AT1G13440 | AT2G36830 | 0.31874032 | undirected | NA | NA |
| ## | 3294 | AT1G13440 | AT3G15353 | 0.23447891 | undirected | NA | NA |
| ## | 3295 | AT1G13440 | AT1G62480 | 0.31307105 | undirected | NA | NA |
| ## | 3296 | AT1G13440 | AT5G38940 | 0.33803905 | undirected | NA | NA |
| ## | 3297 | AT1G13440 | ATCG01180 | 0.33759815 | undirected | NA | NA |
| ## | 3298 | AT1G13440 | AT1G07930 | 0.33087981 | undirected | NA | NA |
| ## | 3299 | AT1G13440 | ATCG00950 | 0.30810429 | undirected | NA | NA |
| ## | 3300 | AT1G13440 | AT3G13920 | 0.27026923 | undirected | NA | NA |
| ## | 3301 | AT1G13440 | AT1G28290 | 0.25787651 | undirected | NA | NA |
| ## | 3302 | AT1G13440 | AT1G04270 | 0.33396748 | undirected | NA | NA |
| ## | 3303 | AT1G13440 | AT4G35100 | 0.34029754 | undirected | NA | NA |
| ## | 3304 | AT1G13440 | AT5G48480 | 0.33365617 | undirected | NA | NA |
| ## | 3305 | AT1G13440 | AT1G52400 | 0.21201170 | undirected | NA | NA |
| ## | 3306 | AT1G13440 | AT3G02470 | 0.13657323 | undirected | NA | NA |
| ## | 3307 | AT1G13440 | AT5G15200 | 0.38343958 | undirected | NA | NA |
| ## | 3308 | AT1G13440 | AT5G48485 | 0.30160573 | undirected | NA | NA |
| ## | 3309 | AT1G13440 | AT1G20620 | 0.33772681 | undirected | NA | NA |
| ## | 3310 | AT1G13440 | AT2G27720 | 0.29900655 | undirected | NA | NA |
| ## | 3311 | AT1G13440 | AT5G02870 | 0.26015802 | undirected | NA | NA |
| ## | 3312 | AT1G13440 | AT4G15000 | 0.35582222 | undirected | NA | NA |
| ## | 3313 | AT1G13440 | AT5G20290 | 0.20418620 | undirected | NA | NA |
| ## | 3314 | AT1G13440 | AT4G31700 | 0.24341642 | undirected | NA | NA |
| ## | 3315 | AT1G13440 | AT3G04400 | 0.13538849 | undirected | NA | NA |
| ## | 3316 | AT1G13440 | AT3G02230 | 0.25445000 | undirected | NA | NA |
| ## | 3317 | AT1G13440 | AT1G54410 | 0.32798426 | undirected | NA | NA |
| ## | 3318 | AT1G13440 | AT3G24830 | 0.33396569 | undirected | NA | NA |
| ## | 3319 | AT1G13440 | AT1G48920 | 0.13682000 | undirected | NA | NA |
| ## | 3320 | AT1G13440 | AT3G08770 | 0.35292261 | undirected | NA | NA |
| ## | 3321 | AT1G13440 | AT3G05590 | 0.36899746 | undirected | NA | NA |
| ## | 3322 | AT1G13440 | AT4G38680 | 0.33478168 | undirected | NA | NA |
| ## | 3323 | AT1G13440 | AT3G04840 | 0.26029946 | undirected | NA | NA |
| ## | 3324 | AT1G13440 | AT2G28790 | 0.19666269 | undirected | NA | NA |
| ## | 3325 | AT1G13440 | AT1G70600 | 0.30608582 | undirected | NA | NA |
| ## | 3326 | AT1G13440 | AT4G27090 | 0.33410002 | undirected | NA | NA |
| ## | 3327 | AT1G13440 | AT1G77510 | 0.30778713 | undirected | NA | NA |
| ## | 3328 | AT1G13440 | AT1G70830 | 0.11568376 | undirected | NA | NA |
| ## | 3329 | AT1G13440 | AT1G15690 | 0.24008906 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3330 | AT1G13440 | AT3G52590 | 0.09914054 | undirected | NA | NA |
| ## | 3331 | AT1G13440 | AT5G07090 | 0.24740245 | undirected | NA | NA |
| ## | 3332 | AT1G13440 | AT5G17920 | 0.10594738 | undirected | NA | NA |
| ## | 3333 | AT1G13440 | AT5G56030 | 0.28671548 | undirected | NA | NA |
| ## | 3334 | AT1G13440 | AT2G41840 | 0.26625080 | undirected | NA | NA |
| ## | 3335 | AT1G13440 | AT3G60245 | 0.33936719 | undirected | NA | NA |
| ## | 3336 | AT1G13440 | AT2G08665 | 0.30016960 | undirected | NA | NA |
| ## | 3337 | AT1G13440 | AT3G26520 | 0.02539576 | undirected | NA | NA |
| ## | 3338 | AT1G13440 | AT2G42840 | 0.30801632 | undirected | NA | NA |
| ## | 3339 | AT1G13440 | AT1G72370 | 0.24509381 | undirected | NA | NA |
| ## | 3340 | AT1G13440 | AT2G05520 | 0.32286637 | undirected | NA | NA |
| ## | 3341 | AT1G13440 | AT4G22513 | 0.31263432 | undirected | NA | NA |
| ## | 3342 | AT1G13440 | AT4G22530 | 0.31284599 | undirected | NA | NA |
| ## | 3343 | AT1G13440 | ATCG01210 | 0.28023802 | undirected | NA | NA |
| ## | 3344 | AT1G13440 | AT3G25520 | 0.30670401 | undirected | NA | NA |
| ## | 3345 | AT2G16600 | AT1G07920 | 0.18202293 | undirected | NA | NA |
| ## | 3346 | AT2G16600 | AT1G04410 | 0.20539205 | undirected | NA | NA |
| ## | 3347 | AT2G16600 | AT2G36830 | 0.27517650 | undirected | NA | NA |
| ## | 3348 | AT2G16600 | AT3G15353 | 0.18490856 | undirected | NA | NA |
| ## | 3349 | AT2G16600 | AT1G62480 | 0.31971694 | undirected | NA | NA |
| ## | 3350 | AT2G16600 | AT5G38940 | 0.29115077 | undirected | NA | NA |
| ## | 3351 | AT2G16600 | ATCG01180 | 0.30333678 | undirected | NA | NA |
| ## | 3352 | AT2G16600 | AT1G07930 | 0.22336402 | undirected | NA | NA |
| ## | 3353 | AT2G16600 | ATCG00950 | 0.32847123 | undirected | NA | NA |
| ## | 3354 | AT2G16600 | AT3G13920 | 0.25889214 | undirected | NA | NA |
| ## | 3355 | AT2G16600 | AT1G28290 | 0.27205538 | undirected | NA | NA |
| ## | 3356 | AT2G16600 | AT1G04270 | 0.30277918 | undirected | NA | NA |
| ## | 3357 | AT2G16600 | AT4G35100 | 0.32858199 | undirected | NA | NA |
| ## | 3358 | AT2G16600 | AT5G48480 | 0.30151761 | undirected | NA | NA |
| ## | 3359 | AT2G16600 | AT1G52400 | 0.23544831 | undirected | NA | NA |
| ## | 3360 | AT2G16600 | AT3G02470 | 0.18644552 | undirected | NA | NA |
| ## | 3361 | AT2G16600 | AT5G15200 | 0.34121432 | undirected | NA | NA |
| ## | 3362 | AT2G16600 | AT5G48485 | 0.33230050 | undirected | NA | NA |
| ## | 3363 | AT2G16600 | AT1G20620 | 0.27782333 | undirected | NA | NA |
| ## | 3364 | AT2G16600 | AT2G27720 | 0.32718156 | undirected | NA | NA |
| ## | 3365 | AT2G16600 | AT5G02870 | 0.23841487 | undirected | NA | NA |
| ## | 3366 | AT2G16600 | AT4G15000 | 0.30219363 | undirected | NA | NA |
| ## | 3367 | AT2G16600 | AT5G20290 | 0.13436345 | undirected | NA | NA |
| ## | 3368 | AT2G16600 | AT4G31700 | 0.14662193 | undirected | NA | NA |
| ## | 3369 | AT2G16600 | AT3G04400 | 0.09823080 | undirected | NA | NA |
| ## | 3370 | AT2G16600 | AT3G02230 | 0.25946335 | undirected | NA | NA |
| ## | 3371 | AT2G16600 | AT1G54410 | 0.30327673 | undirected | NA | NA |
| ## | 3372 | AT2G16600 | AT3G24830 | 0.34826619 | undirected | NA | NA |
| ## | 3373 | AT2G16600 | AT1G48920 | 0.09340588 | undirected | NA | NA |
| ## | 3374 | AT2G16600 | AT3G08770 | 0.31251234 | undirected | NA | NA |
| ## | 3375 | AT2G16600 | AT3G05590 | 0.32130723 | undirected | NA | NA |
| ## | 3376 | AT2G16600 | AT4G38680 | 0.32546157 | undirected | NA | NA |
| ## | 3377 | AT2G16600 | AT3G04840 | 0.29873393 | undirected | NA | NA |
| ## | 3378 | AT2G16600 | AT2G28790 | 0.18992592 | undirected | NA | NA |
| ## | 3379 | AT2G16600 | AT1G70600 | 0.26734657 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3380 | AT2G16600 | AT4G27090 | 0.31691495 | undirected | NA | NA |
| ## | 3381 | AT2G16600 | AT1G77510 | 0.26559788 | undirected | NA | NA |
| ## | 3382 | AT2G16600 | AT1G70830 | 0.19215826 | undirected | NA | NA |
| ## | 3383 | AT2G16600 | AT1G15690 | 0.22797416 | undirected | NA | NA |
| ## | 3384 | AT2G16600 | AT3G52590 | 0.20133166 | undirected | NA | NA |
| ## | 3385 | AT2G16600 | AT5G07090 | 0.22790939 | undirected | NA | NA |
| ## | 3386 | AT2G16600 | AT5G17920 | 0.17066273 | undirected | NA | NA |
| ## | 3387 | AT2G16600 | AT5G56030 | 0.25525464 | undirected | NA | NA |
| ## | 3388 | AT2G16600 | AT2G41840 | 0.32967352 | undirected | NA | NA |
| ## | 3389 | AT2G16600 | AT3G60245 | 0.26366760 | undirected | NA | NA |
| ## | 3390 | AT2G16600 | AT2G08665 | 0.23412606 | undirected | NA | NA |
| ## | 3391 | AT2G16600 | AT3G26520 | 0.04131785 | undirected | NA | NA |
| ## | 3392 | AT2G16600 | AT2G42840 | 0.31860135 | undirected | NA | NA |
| ## | 3393 | AT2G16600 | AT1G72370 | 0.15293732 | undirected | NA | NA |
| ## | 3394 | AT2G16600 | AT2G05520 | 0.30146973 | undirected | NA | NA |
| ## | 3395 | AT2G16600 | AT4G22513 | 0.31145673 | undirected | NA | NA |
| ## | 3396 | AT2G16600 | AT4G22530 | 0.32019521 | undirected | NA | NA |
| ## | 3397 | AT2G16600 | ATCG01210 | 0.33400838 | undirected | NA | NA |
| ## | 3398 | AT2G16600 | AT3G25520 | 0.26396650 | undirected | NA | NA |
| ## | 3399 | AT1G07920 | AT1G04410 | 0.11150207 | undirected | NA | NA |
| ## | 3400 | AT1G07920 | AT2G36830 | 0.20011703 | undirected | NA | NA |
| ## | 3401 | AT1G07920 | AT3G15353 | 0.06594029 | undirected | NA | NA |
| ## | 3402 | AT1G07920 | AT1G62480 | 0.11217868 | undirected | NA | NA |
| ## | 3403 | AT1G07920 | AT5G38940 | 0.29977379 | undirected | NA | NA |
| ## | 3404 | AT1G07920 | ATCG01180 | 0.15865581 | undirected | NA | NA |
| ## | 3405 | AT1G07920 | AT1G07930 | 0.20722598 | undirected | NA | NA |
| ## | 3406 | AT1G07920 | ATCG00950 | 0.15565080 | undirected | NA | NA |
| ## | 3407 | AT1G07920 | AT3G13920 | 0.21687668 | undirected | NA | NA |
| ## | 3408 | AT1G07920 | AT1G28290 | 0.17363071 | undirected | NA | NA |
| ## | 3409 | AT1G07920 | AT1G04270 | 0.18328942 | undirected | NA | NA |
| ## | 3410 | AT1G07920 | AT4G35100 | 0.23458216 | undirected | NA | NA |
| ## | 3411 | AT1G07920 | AT5G48480 | 0.18683064 | undirected | NA | NA |
| ## | 3412 | AT1G07920 | AT1G52400 | 0.15686675 | undirected | NA | NA |
| ## | 3413 | AT1G07920 | AT3G02470 | 0.02775784 | undirected | NA | NA |
| ## | 3414 | AT1G07920 | AT5G15200 | 0.32941113 | undirected | NA | NA |
| ## | 3415 | AT1G07920 | AT5G48485 | 0.11129760 | undirected | NA | NA |
| ## | 3416 | AT1G07920 | AT1G20620 | 0.20664853 | undirected | NA | NA |
| ## | 3417 | AT1G07920 | AT2G27720 | 0.13266178 | undirected | NA | NA |
| ## | 3418 | AT1G07920 | AT5G02870 | 0.20649672 | undirected | NA | NA |
| ## | 3419 | AT1G07920 | AT4G15000 | 0.28025428 | undirected | NA | NA |
| ## | 3420 | AT1G07920 | AT5G20290 | 0.09999303 | undirected | NA | NA |
| ## | 3421 | AT1G07920 | AT4G31700 | 0.25482431 | undirected | NA | NA |
| ## | 3422 | AT1G07920 | AT3G04400 | 0.04258105 | undirected | NA | NA |
| ## | 3423 | AT1G07920 | AT3G02230 | 0.19619088 | undirected | NA | NA |
| ## | 3424 | AT1G07920 | AT1G54410 | 0.22398993 | undirected | NA | NA |
| ## | 3425 | AT1G07920 | AT3G24830 | 0.26500508 | undirected | NA | NA |
| ## | 3426 | AT1G07920 | AT1G48920 | 0.04044432 | undirected | NA | NA |
| ## | 3427 | AT1G07920 | AT3G08770 | 0.16425620 | undirected | NA | NA |
| ## | 3428 | AT1G07920 | AT3G05590 | 0.37122923 | undirected | NA | NA |
| ## | 3429 | AT1G07920 | AT4G38680 | 0.14796281 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3430 | AT1G07920 | AT3G04840 | 0.07810159 | undirected | NA | NA |
| ## | 3431 | AT1G07920 | AT2G28790 | 0.04630855 | undirected | NA | NA |
| ## | 3432 | AT1G07920 | AT1G70600 | 0.20524018 | undirected | NA | NA |
| ## | 3433 | AT1G07920 | AT4G27090 | 0.15717410 | undirected | NA | NA |
| ## | 3434 | AT1G07920 | AT1G77510 | 0.18896212 | undirected | NA | NA |
| ## | 3435 | AT1G07920 | AT1G70830 | 0.02592042 | undirected | NA | NA |
| ## | 3436 | AT1G07920 | AT1G15690 | 0.19330560 | undirected | NA | NA |
| ## | 3437 | AT1G07920 | AT3G52590 | 0.02792994 | undirected | NA | NA |
| ## | 3438 | AT1G07920 | AT5G07090 | 0.23605573 | undirected | NA | NA |
| ## | 3439 | AT1G07920 | AT5G56030 | 0.22762857 | undirected | NA | NA |
| ## | 3440 | AT1G07920 | AT2G41840 | 0.13943298 | undirected | NA | NA |
| ## | 3441 | AT1G07920 | AT3G60245 | 0.20303031 | undirected | NA | NA |
| ## | 3442 | AT1G07920 | AT2G08665 | 0.22590428 | undirected | NA | NA |
| ## | 3443 | AT1G07920 | AT2G42840 | 0.10606446 | undirected | NA | NA |
| ## | 3444 | AT1G07920 | AT1G72370 | 0.09097459 | undirected | NA | NA |
| ## | 3445 | AT1G07920 | AT2G05520 | 0.22363608 | undirected | NA | NA |
| ## | 3446 | AT1G07920 | AT4G22513 | 0.23766525 | undirected | NA | NA |
| ## | 3447 | AT1G07920 | AT4G22530 | 0.15731508 | undirected | NA | NA |
| ## | 3448 | AT1G07920 | ATCG01210 | 0.10569755 | undirected | NA | NA |
| ## | 3449 | AT1G07920 | AT3G25520 | 0.19568120 | undirected | NA | NA |
| ## | 3450 | AT1G04410 | AT2G36830 | 0.20260576 | undirected | NA | NA |
| ## | 3451 | AT1G04410 | AT3G15353 | 0.28145980 | undirected | NA | NA |
| ## | 3452 | AT1G04410 | AT1G62480 | 0.28424811 | undirected | NA | NA |
| ## | 3453 | AT1G04410 | AT5G38940 | 0.22441398 | undirected | NA | NA |
| ## | 3454 | AT1G04410 | ATCG01180 | 0.30832858 | undirected | NA | NA |
| ## | 3455 | AT1G04410 | AT1G07930 | 0.20490975 | undirected | NA | NA |
| ## | 3456 | AT1G04410 | ATCG00950 | 0.28641948 | undirected | NA | NA |
| ## | 3457 | AT1G04410 | AT3G13920 | 0.12988037 | undirected | NA | NA |
| ## | 3458 | AT1G04410 | AT1G28290 | 0.07695433 | undirected | NA | NA |
| ## | 3459 | AT1G04410 | AT1G04270 | 0.26965171 | undirected | NA | NA |
| ## | 3460 | AT1G04410 | AT4G35100 | 0.29875171 | undirected | NA | NA |
| ## | 3461 | AT1G04410 | AT5G48480 | 0.21967680 | undirected | NA | NA |
| ## | 3462 | AT1G04410 | AT1G52400 | 0.05278545 | undirected | NA | NA |
| ## | 3463 | AT1G04410 | AT3G02470 | 0.13354565 | undirected | NA | NA |
| ## | 3464 | AT1G04410 | AT5G15200 | 0.25227201 | undirected | NA | NA |
| ## | 3465 | AT1G04410 | AT5G48485 | 0.27917651 | undirected | NA | NA |
| ## | 3466 | AT1G04410 | AT1G20620 | 0.19779043 | undirected | NA | NA |
| ## | 3467 | AT1G04410 | AT2G27720 | 0.19067156 | undirected | NA | NA |
| ## | 3468 | AT1G04410 | AT5G02870 | 0.09667161 | undirected | NA | NA |
| ## | 3469 | AT1G04410 | AT4G15000 | 0.29137909 | undirected | NA | NA |
| ## | 3470 | AT1G04410 | AT5G20290 | 0.20089050 | undirected | NA | NA |
| ## | 3471 | AT1G04410 | AT4G31700 | 0.05663523 | undirected | NA | NA |
| ## | 3472 | AT1G04410 | AT3G04400 | 0.17741727 | undirected | NA | NA |
| ## | 3473 | AT1G04410 | AT3G02230 | 0.19328703 | undirected | NA | NA |
| ## | 3474 | AT1G04410 | AT1G54410 | 0.30826814 | undirected | NA | NA |
| ## | 3475 | AT1G04410 | AT3G24830 | 0.21534486 | undirected | NA | NA |
| ## | 3476 | AT1G04410 | AT1G48920 | 0.21198678 | undirected | NA | NA |
| ## | 3477 | AT1G04410 | AT3G08770 | 0.25589851 | undirected | NA | NA |
| ## | 3478 | AT1G04410 | AT3G05590 | 0.18858276 | undirected | NA | NA |
| ## | 3479 | AT1G04410 | AT4G38680 | 0.31059477 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3480 | AT1G04410 | AT3G04840 | 0.17848391 | undirected | NA | NA |
| ## | 3481 | AT1G04410 | AT2G28790 | 0.22956878 | undirected | NA | NA |
| ## | 3482 | AT1G04410 | AT1G70600 | 0.16620998 | undirected | NA | NA |
| ## | 3483 | AT1G04410 | AT4G27090 | 0.33459008 | undirected | NA | NA |
| ## | 3484 | AT1G04410 | AT1G77510 | 0.18540714 | undirected | NA | NA |
| ## | 3485 | AT1G04410 | AT1G70830 | 0.07833092 | undirected | NA | NA |
| ## | 3486 | AT1G04410 | AT1G15690 | 0.05606485 | undirected | NA | NA |
| ## | 3487 | AT1G04410 | AT3G52590 | 0.03186723 | undirected | NA | NA |
| ## | 3488 | AT1G04410 | AT5G07090 | 0.11353022 | undirected | NA | NA |
| ## | 3489 | AT1G04410 | AT5G17920 | 0.09722534 | undirected | NA | NA |
| ## | 3490 | AT1G04410 | AT5G56030 | 0.25440173 | undirected | NA | NA |
| ## | 3491 | AT1G04410 | AT2G41840 | 0.25673046 | undirected | NA | NA |
| ## | 3492 | AT1G04410 | AT3G60245 | 0.19774437 | undirected | NA | NA |
| ## | 3493 | AT1G04410 | AT2G08665 | 0.05027373 | undirected | NA | NA |
| ## | 3494 | AT1G04410 | AT3G26520 | 0.06655634 | undirected | NA | NA |
| ## | 3495 | AT1G04410 | AT2G42840 | 0.28798474 | undirected | NA | NA |
| ## | 3496 | AT1G04410 | AT1G72370 | 0.28656365 | undirected | NA | NA |
| ## | 3497 | AT1G04410 | AT2G05520 | 0.30417229 | undirected | NA | NA |
| ## | 3498 | AT1G04410 | AT4G22513 | 0.24343099 | undirected | NA | NA |
| ## | 3499 | AT1G04410 | AT4G22530 | 0.27152033 | undirected | NA | NA |
| ## | 3500 | AT1G04410 | ATCG01210 | 0.25752474 | undirected | NA | NA |
| ## | 3501 | AT1G04410 | AT3G25520 | 0.08640834 | undirected | NA | NA |
| ## | 3502 | AT2G36830 | AT3G15353 | 0.17739228 | undirected | NA | NA |
| ## | 3503 | AT2G36830 | AT1G62480 | 0.27996783 | undirected | NA | NA |
| ## | 3504 | AT2G36830 | AT5G38940 | 0.31672434 | undirected | NA | NA |
| ## | 3505 | AT2G36830 | ATCG01180 | 0.27208902 | undirected | NA | NA |
| ## | 3506 | AT2G36830 | AT1G07930 | 0.26808238 | undirected | NA | NA |
| ## | 3507 | AT2G36830 | ATCG00950 | 0.30371791 | undirected | NA | NA |
| ## | 3508 | AT2G36830 | AT3G13920 | 0.25083420 | undirected | NA | NA |
| ## | 3509 | AT2G36830 | AT1G28290 | 0.21248479 | undirected | NA | NA |
| ## | 3510 | AT2G36830 | AT1G04270 | 0.28643876 | undirected | NA | NA |
| ## | 3511 | AT2G36830 | AT4G35100 | 0.35485495 | undirected | NA | NA |
| ## | 3512 | AT2G36830 | AT5G48480 | 0.28170809 | undirected | NA | NA |
| ## | 3513 | AT2G36830 | AT1G52400 | 0.16809099 | undirected | NA | NA |
| ## | 3514 | AT2G36830 | AT3G02470 | 0.11422833 | undirected | NA | NA |
| ## | 3515 | AT2G36830 | AT5G15200 | 0.37525863 | undirected | NA | NA |
| ## | 3516 | AT2G36830 | AT5G48485 | 0.27229686 | undirected | NA | NA |
| ## | 3517 | AT2G36830 | AT1G20620 | 0.28256706 | undirected | NA | NA |
| ## | 3518 | AT2G36830 | AT2G27720 | 0.27198208 | undirected | NA | NA |
| ## | 3519 | AT2G36830 | AT5G02870 | 0.19692913 | undirected | NA | NA |
| ## | 3520 | AT2G36830 | AT4G15000 | 0.35325301 | undirected | NA | NA |
| ## | 3521 | AT2G36830 | AT5G20290 | 0.13459448 | undirected | NA | NA |
| ## | 3522 | AT2G36830 | AT4G31700 | 0.19079495 | undirected | NA | NA |
| ## | 3523 | AT2G36830 | AT3G04400 | 0.13436570 | undirected | NA | NA |
| ## | 3524 | AT2G36830 | AT3G02230 | 0.21696510 | undirected | NA | NA |
| ## | 3525 | AT2G36830 | AT1G54410 | 0.34596955 | undirected | NA | NA |
| ## | 3526 | AT2G36830 | AT3G24830 | 0.32250412 | undirected | NA | NA |
| ## | 3527 | AT2G36830 | AT1G48920 | 0.11327688 | undirected | NA | NA |
| ## | 3528 | AT2G36830 | AT3G08770 | 0.27063942 | undirected | NA | NA |
| ## | 3529 | AT2G36830 | AT3G05590 | 0.34471026 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3530 | AT2G36830 | AT4G38680 | 0.27766950 | undirected | NA | NA |
| ## | 3531 | AT2G36830 | AT3G04840 | 0.26349938 | undirected | NA | NA |
| ## | 3532 | AT2G36830 | AT2G28790 | 0.16675112 | undirected | NA | NA |
| ## | 3533 | AT2G36830 | AT1G70600 | 0.24184308 | undirected | NA | NA |
| ## | 3534 | AT2G36830 | AT4G27090 | 0.26676436 | undirected | NA | NA |
| ## | 3535 | AT2G36830 | AT1G77510 | 0.26737858 | undirected | NA | NA |
| ## | 3536 | AT2G36830 | AT1G70830 | 0.10406843 | undirected | NA | NA |
| ## | 3537 | AT2G36830 | AT1G15690 | 0.16353236 | undirected | NA | NA |
| ## | 3538 | AT2G36830 | AT3G52590 | 0.07346527 | undirected | NA | NA |
| ## | 3539 | AT2G36830 | AT5G07090 | 0.22604570 | undirected | NA | NA |
| ## | 3540 | AT2G36830 | AT5G17920 | 0.11711858 | undirected | NA | NA |
| ## | 3541 | AT2G36830 | AT5G56030 | 0.27256989 | undirected | NA | NA |
| ## | 3542 | AT2G36830 | AT2G41840 | 0.29786616 | undirected | NA | NA |
| ## | 3543 | AT2G36830 | AT3G60245 | 0.29883705 | undirected | NA | NA |
| ## | 3544 | AT2G36830 | AT2G08665 | 0.25458052 | undirected | NA | NA |
| ## | 3545 | AT2G36830 | AT3G26520 | 0.02276016 | undirected | NA | NA |
| ## | 3546 | AT2G36830 | AT2G42840 | 0.26673259 | undirected | NA | NA |
| ## | 3547 | AT2G36830 | AT1G72370 | 0.18099031 | undirected | NA | NA |
| ## | 3548 | AT2G36830 | AT2G05520 | 0.31884087 | undirected | NA | NA |
| ## | 3549 | AT2G36830 | AT4G22513 | 0.29949611 | undirected | NA | NA |
| ## | 3550 | AT2G36830 | AT4G22530 | 0.27174075 | undirected | NA | NA |
| ## | 3551 | AT2G36830 | ATCG01210 | 0.24850948 | undirected | NA | NA |
| ## | 3552 | AT2G36830 | AT3G25520 | 0.28450445 | undirected | NA | NA |
| ## | 3553 | AT3G15353 | AT1G62480 | 0.36229643 | undirected | NA | NA |
| ## | 3554 | AT3G15353 | AT5G38940 | 0.15500664 | undirected | NA | NA |
| ## | 3555 | AT3G15353 | ATCG01180 | 0.30560402 | undirected | NA | NA |
| ## | 3556 | AT3G15353 | AT1G07930 | 0.15891063 | undirected | NA | NA |
| ## | 3557 | AT3G15353 | ATCG00950 | 0.32254141 | undirected | NA | NA |
| ## | 3558 | AT3G15353 | AT3G13920 | 0.11309674 | undirected | NA | NA |
| ## | 3559 | AT3G15353 | AT1G28290 | 0.07719068 | undirected | NA | NA |
| ## | 3560 | AT3G15353 | AT1G04270 | 0.26312350 | undirected | NA | NA |
| ## | 3561 | AT3G15353 | AT4G35100 | 0.26873705 | undirected | NA | NA |
| ## | 3562 | AT3G15353 | AT5G48480 | 0.22004555 | undirected | NA | NA |
| ## | 3563 | AT3G15353 | AT1G52400 | 0.04551933 | undirected | NA | NA |
| ## | 3564 | AT3G15353 | AT3G02470 | 0.15021117 | undirected | NA | NA |
| ## | 3565 | AT3G15353 | AT5G15200 | 0.19138615 | undirected | NA | NA |
| ## | 3566 | AT3G15353 | AT5G48485 | 0.34288800 | undirected | NA | NA |
| ## | 3567 | AT3G15353 | AT1G20620 | 0.18047829 | undirected | NA | NA |
| ## | 3568 | AT3G15353 | AT2G27720 | 0.24091845 | undirected | NA | NA |
| ## | 3569 | AT3G15353 | AT5G02870 | 0.07816126 | undirected | NA | NA |
| ## | 3570 | AT3G15353 | AT4G15000 | 0.24231722 | undirected | NA | NA |
| ## | 3571 | AT3G15353 | AT5G20290 | 0.14672106 | undirected | NA | NA |
| ## | 3572 | AT3G15353 | AT4G31700 | 0.03090353 | undirected | NA | NA |
| ## | 3573 | AT3G15353 | AT3G04400 | 0.21622818 | undirected | NA | NA |
| ## | 3574 | AT3G15353 | AT3G02230 | 0.13665871 | undirected | NA | NA |
| ## | 3575 | AT3G15353 | AT1G54410 | 0.28361110 | undirected | NA | NA |
| ## | 3576 | AT3G15353 | AT3G24830 | 0.17423217 | undirected | NA | NA |
| ## | 3577 | AT3G15353 | AT1G48920 | 0.27242451 | undirected | NA | NA |
| ## | 3578 | AT3G15353 | AT3G08770 | 0.29404705 | undirected | NA | NA |
| ## | 3579 | AT3G15353 | AT3G05590 | 0.12099457 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3580 | AT3G15353 | AT4G38680 | 0.34217160 | undirected | NA | NA |
| ## | 3581 | AT3G15353 | AT3G04840 | 0.26948479 | undirected | NA | NA |
| ## | 3582 | AT3G15353 | AT2G28790 | 0.24966570 | undirected | NA | NA |
| ## | 3583 | AT3G15353 | AT1G70600 | 0.13414338 | undirected | NA | NA |
| ## | 3584 | AT3G15353 | AT4G27090 | 0.34835052 | undirected | NA | NA |
| ## | 3585 | AT3G15353 | AT1G77510 | 0.15278890 | undirected | NA | NA |
| ## | 3586 | AT3G15353 | AT1G70830 | 0.07774841 | undirected | NA | NA |
| ## | 3587 | AT3G15353 | AT1G15690 | 0.04270519 | undirected | NA | NA |
| ## | 3588 | AT3G15353 | AT3G52590 | 0.03242446 | undirected | NA | NA |
| ## | 3589 | AT3G15353 | AT5G07090 | 0.07587215 | undirected | NA | NA |
| ## | 3590 | AT3G15353 | AT5G17920 | 0.11803321 | undirected | NA | NA |
| ## | 3591 | AT3G15353 | AT5G56030 | 0.17441285 | undirected | NA | NA |
| ## | 3592 | AT3G15353 | AT2G41840 | 0.29437344 | undirected | NA | NA |
| ## | 3593 | AT3G15353 | AT3G60245 | 0.17200406 | undirected | NA | NA |
| ## | 3594 | AT3G15353 | AT2G08665 | 0.04964896 | undirected | NA | NA |
| ## | 3595 | AT3G15353 | AT3G26520 | 0.10594313 | undirected | NA | NA |
| ## | 3596 | AT3G15353 | AT2G42840 | 0.37860016 | undirected | NA | NA |
| ## | 3597 | AT3G15353 | AT1G72370 | 0.28293172 | undirected | NA | NA |
| ## | 3598 | AT3G15353 | AT2G05520 | 0.25859526 | undirected | NA | NA |
| ## | 3599 | AT3G15353 | AT4G22513 | 0.19269279 | undirected | NA | NA |
| ## | 3600 | AT3G15353 | AT4G22530 | 0.28868665 | undirected | NA | NA |
| ## | 3601 | AT3G15353 | ATCG01210 | 0.32771512 | undirected | NA | NA |
| ## | 3602 | AT3G15353 | AT3G25520 | 0.08870583 | undirected | NA | NA |
| ## | 3603 | AT1G62480 | AT5G38940 | 0.25797325 | undirected | NA | NA |
| ## | 3604 | AT1G62480 | ATCG01180 | 0.32137253 | undirected | NA | NA |
| ## | 3605 | AT1G62480 | AT1G07930 | 0.18732378 | undirected | NA | NA |
| ## | 3606 | AT1G62480 | ATCG00950 | 0.42627485 | undirected | NA | NA |
| ## | 3607 | AT1G62480 | AT3G13920 | 0.20423124 | undirected | NA | NA |
| ## | 3608 | AT1G62480 | AT1G28290 | 0.14705343 | undirected | NA | NA |
| ## | 3609 | AT1G62480 | AT1G04270 | 0.34364221 | undirected | NA | NA |
| ## | 3610 | AT1G62480 | AT4G35100 | 0.41611667 | undirected | NA | NA |
| ## | 3611 | AT1G62480 | AT5G48480 | 0.30966360 | undirected | NA | NA |
| ## | 3612 | AT1G62480 | AT1G52400 | 0.09823476 | undirected | NA | NA |
| ## | 3613 | AT1G62480 | AT3G02470 | 0.26121916 | undirected | NA | NA |
| ## | 3614 | AT1G62480 | AT5G15200 | 0.33128999 | undirected | NA | NA |
| ## | 3615 | AT1G62480 | AT5G48485 | 0.40562636 | undirected | NA | NA |
| ## | 3616 | AT1G62480 | AT1G20620 | 0.24794280 | undirected | NA | NA |
| ## | 3617 | AT1G62480 | AT2G27720 | 0.33883887 | undirected | NA | NA |
| ## | 3618 | AT1G62480 | AT5G02870 | 0.14061267 | undirected | NA | NA |
| ## | 3619 | AT1G62480 | AT4G15000 | 0.35412062 | undirected | NA | NA |
| ## | 3620 | AT1G62480 | AT5G20290 | 0.15703693 | undirected | NA | NA |
| ## | 3621 | AT1G62480 | AT4G31700 | 0.06177864 | undirected | NA | NA |
| ## | 3622 | AT1G62480 | AT3G04400 | 0.25828016 | undirected | NA | NA |
| ## | 3623 | AT1G62480 | AT3G02230 | 0.20789058 | undirected | NA | NA |
| ## | 3624 | AT1G62480 | AT1G54410 | 0.39941890 | undirected | NA | NA |
| ## | 3625 | AT1G62480 | AT3G24830 | 0.32242105 | undirected | NA | NA |
| ## | 3626 | AT1G62480 | AT1G48920 | 0.26984736 | undirected | NA | NA |
| ## | 3627 | AT1G62480 | AT3G08770 | 0.27883045 | undirected | NA | NA |
| ## | 3628 | AT1G62480 | AT3G05590 | 0.24123177 | undirected | NA | NA |
| ## | 3629 | AT1G62480 | AT4G38680 | 0.38813811 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3630 | AT1G62480 | AT3G04840 | 0.37211787 | undirected | NA | NA |
| ## | 3631 | AT1G62480 | AT2G28790 | 0.35590760 | undirected | NA | NA |
| ## | 3632 | AT1G62480 | AT1G70600 | 0.21098723 | undirected | NA | NA |
| ## | 3633 | AT1G62480 | AT4G27090 | 0.38254687 | undirected | NA | NA |
| ## | 3634 | AT1G62480 | AT1G77510 | 0.23656146 | undirected | NA | NA |
| ## | 3635 | AT1G62480 | AT1G70830 | 0.19580044 | undirected | NA | NA |
| ## | 3636 | AT1G62480 | AT1G15690 | 0.07971852 | undirected | NA | NA |
| ## | 3637 | AT1G62480 | AT3G52590 | 0.11780256 | undirected | NA | NA |
| ## | 3638 | AT1G62480 | AT5G07090 | 0.14845123 | undirected | NA | NA |
| ## | 3639 | AT1G62480 | AT5G17920 | 0.26111436 | undirected | NA | NA |
| ## | 3640 | AT1G62480 | AT5G56030 | 0.26253544 | undirected | NA | NA |
| ## | 3641 | AT1G62480 | AT2G41840 | 0.45109476 | undirected | NA | NA |
| ## | 3642 | AT1G62480 | AT3G60245 | 0.23291266 | undirected | NA | NA |
| ## | 3643 | AT1G62480 | AT2G08665 | 0.14878930 | undirected | NA | NA |
| ## | 3644 | AT1G62480 | AT3G26520 | 0.10594354 | undirected | NA | NA |
| ## | 3645 | AT1G62480 | AT2G42840 | 0.35454355 | undirected | NA | NA |
| ## | 3646 | AT1G62480 | AT1G72370 | 0.30972169 | undirected | NA | NA |
| ## | 3647 | AT1G62480 | AT2G05520 | 0.36288892 | undirected | NA | NA |
| ## | 3648 | AT1G62480 | AT4G22513 | 0.31455932 | undirected | NA | NA |
| ## | 3649 | AT1G62480 | AT4G22530 | 0.36111373 | undirected | NA | NA |
| ## | 3650 | AT1G62480 | ATCG01210 | 0.41620202 | undirected | NA | NA |
| ## | 3651 | AT1G62480 | AT3G25520 | 0.18431600 | undirected | NA | NA |
| ## | 3652 | AT5G38940 | ATCG01180 | 0.31744763 | undirected | NA | NA |
| ## | 3653 | AT5G38940 | AT1G07930 | 0.30789143 | undirected | NA | NA |
| ## | 3654 | AT5G38940 | ATCG00950 | 0.30118602 | undirected | NA | NA |
| ## | 3655 | AT5G38940 | AT3G13920 | 0.31198314 | undirected | NA | NA |
| ## | 3656 | AT5G38940 | AT1G28290 | 0.27911322 | undirected | NA | NA |
| ## | 3657 | AT5G38940 | AT1G04270 | 0.32262868 | undirected | NA | NA |
| ## | 3658 | AT5G38940 | AT4G35100 | 0.30910256 | undirected | NA | NA |
| ## | 3659 | AT5G38940 | AT5G48480 | 0.31592465 | undirected | NA | NA |
| ## | 3660 | AT5G38940 | AT1G52400 | 0.27318844 | undirected | NA | NA |
| ## | 3661 | AT5G38940 | AT3G02470 | 0.11030086 | undirected | NA | NA |
| ## | 3662 | AT5G38940 | AT5G15200 | 0.35584429 | undirected | NA | NA |
| ## | 3663 | AT5G38940 | AT5G48485 | 0.26814641 | undirected | NA | NA |
| ## | 3664 | AT5G38940 | AT1G20620 | 0.32394508 | undirected | NA | NA |
| ## | 3665 | AT5G38940 | AT2G27720 | 0.27758826 | undirected | NA | NA |
| ## | 3666 | AT5G38940 | AT5G02870 | 0.30985168 | undirected | NA | NA |
| ## | 3667 | AT5G38940 | AT4G15000 | 0.32892365 | undirected | NA | NA |
| ## | 3668 | AT5G38940 | AT5G20290 | 0.18227527 | undirected | NA | NA |
| ## | 3669 | AT5G38940 | AT4G31700 | 0.26482905 | undirected | NA | NA |
| ## | 3670 | AT5G38940 | AT3G04400 | 0.07430212 | undirected | NA | NA |
| ## | 3671 | AT5G38940 | AT3G02230 | 0.31104006 | undirected | NA | NA |
| ## | 3672 | AT5G38940 | AT1G54410 | 0.32730374 | undirected | NA | NA |
| ## | 3673 | AT5G38940 | AT3G24830 | 0.32107417 | undirected | NA | NA |
| ## | 3674 | AT5G38940 | AT1G48920 | 0.07058607 | undirected | NA | NA |
| ## | 3675 | AT5G38940 | AT3G08770 | 0.32133343 | undirected | NA | NA |
| ## | 3676 | AT5G38940 | AT3G05590 | 0.36725164 | undirected | NA | NA |
| ## | 3677 | AT5G38940 | AT4G38680 | 0.30670464 | undirected | NA | NA |
| ## | 3678 | AT5G38940 | AT3G04840 | 0.20262436 | undirected | NA | NA |
| ## | 3679 | AT5G38940 | AT2G28790 | 0.13451076 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3680 | AT5G38940 | AT1G70600 | 0.33555471 | undirected | NA | NA |
| ## | 3681 | AT5G38940 | AT4G27090 | 0.31546908 | undirected | NA | NA |
| ## | 3682 | AT5G38940 | AT1G77510 | 0.30292368 | undirected | NA | NA |
| ## | 3683 | AT5G38940 | AT1G70830 | 0.11398369 | undirected | NA | NA |
| ## | 3684 | AT5G38940 | AT1G15690 | 0.29926351 | undirected | NA | NA |
| ## | 3685 | AT5G38940 | AT3G52590 | 0.11984557 | undirected | NA | NA |
| ## | 3686 | AT5G38940 | AT5G07090 | 0.31062384 | undirected | NA | NA |
| ## | 3687 | AT5G38940 | AT5G17920 | 0.07942806 | undirected | NA | NA |
| ## | 3688 | AT5G38940 | AT5G56030 | 0.31047499 | undirected | NA | NA |
| ## | 3689 | AT5G38940 | AT2G41840 | 0.26744909 | undirected | NA | NA |
| ## | 3690 | AT5G38940 | AT3G60245 | 0.31214943 | undirected | NA | NA |
| ## | 3691 | AT5G38940 | AT2G08665 | 0.28827918 | undirected | NA | NA |
| ## | 3692 | AT5G38940 | AT2G42840 | 0.25483563 | undirected | NA | NA |
| ## | 3693 | AT5G38940 | AT1G72370 | 0.16017929 | undirected | NA | NA |
| ## | 3694 | AT5G38940 | AT2G05520 | 0.32171244 | undirected | NA | NA |
| ## | 3695 | AT5G38940 | AT4G22513 | 0.30540480 | undirected | NA | NA |
| ## | 3696 | AT5G38940 | AT4G22530 | 0.31527695 | undirected | NA | NA |
| ## | 3697 | AT5G38940 | ATCG01210 | 0.26334060 | undirected | NA | NA |
| ## | 3698 | AT5G38940 | AT3G25520 | 0.29942062 | undirected | NA | NA |
| ## | 3699 | ATCG01180 | AT1G07930 | 0.25059500 | undirected | NA | NA |
| ## | 3700 | ATCG01180 | ATCG00950 | 0.36060606 | undirected | NA | NA |
| ## | 3701 | ATCG01180 | AT3G13920 | 0.22037796 | undirected | NA | NA |
| ## | 3702 | ATCG01180 | AT1G28290 | 0.15247083 | undirected | NA | NA |
| ## | 3703 | ATCG01180 | AT1G04270 | 0.31468708 | undirected | NA | NA |
| ## | 3704 | ATCG01180 | AT4G35100 | 0.39439315 | undirected | NA | NA |
| ## | 3705 | ATCG01180 | AT5G48480 | 0.27313463 | undirected | NA | NA |
| ## | 3706 | ATCG01180 | AT1G52400 | 0.11578875 | undirected | NA | NA |
| ## | 3707 | ATCG01180 | AT3G02470 | 0.20268691 | undirected | NA | NA |
| ## | 3708 | ATCG01180 | AT5G15200 | 0.36764807 | undirected | NA | NA |
| ## | 3709 | ATCG01180 | AT5G48485 | 0.30930458 | undirected | NA | NA |
| ## | 3710 | ATCG01180 | AT1G20620 | 0.23755839 | undirected | NA | NA |
| ## | 3711 | ATCG01180 | AT2G27720 | 0.26034165 | undirected | NA | NA |
| ## | 3712 | ATCG01180 | AT5G02870 | 0.16504972 | undirected | NA | NA |
| ## | 3713 | ATCG01180 | AT4G15000 | 0.37300594 | undirected | NA | NA |
| ## | 3714 | ATCG01180 | AT5G20290 | 0.21360905 | undirected | NA | NA |
| ## | 3715 | ATCG01180 | AT4G31700 | 0.10532744 | undirected | NA | NA |
| ## | 3716 | ATCG01180 | AT3G04400 | 0.18401961 | undirected | NA | NA |
| ## | 3717 | ATCG01180 | AT3G02230 | 0.25364027 | undirected | NA | NA |
| ## | 3718 | ATCG01180 | AT1G54410 | 0.38598862 | undirected | NA | NA |
| ## | 3719 | ATCG01180 | AT3G24830 | 0.32967823 | undirected | NA | NA |
| ## | 3720 | ATCG01180 | AT1G48920 | 0.18003035 | undirected | NA | NA |
| ## | 3721 | ATCG01180 | AT3G08770 | 0.30069083 | undirected | NA | NA |
| ## | 3722 | ATCG01180 | AT3G05590 | 0.30183210 | undirected | NA | NA |
| ## | 3723 | ATCG01180 | AT4G38680 | 0.32903983 | undirected | NA | NA |
| ## | 3724 | ATCG01180 | AT3G04840 | 0.29552494 | undirected | NA | NA |
| ## | 3725 | ATCG01180 | AT2G28790 | 0.28716130 | undirected | NA | NA |
| ## | 3726 | ATCG01180 | AT1G70600 | 0.23638628 | undirected | NA | NA |
| ## | 3727 | ATCG01180 | AT4G27090 | 0.34055978 | undirected | NA | NA |
| ## | 3728 | ATCG01180 | AT1G77510 | 0.22902325 | undirected | NA | NA |
| ## | 3729 | ATCG01180 | AT1G70830 | 0.16886160 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3730 | ATCG01180 | AT1G15690 | 0.12474109 | undirected | NA | NA |
| ## | 3731 | ATCG01180 | AT3G52590 | 0.11069567 | undirected | NA | NA |
| ## | 3732 | ATCG01180 | AT5G07090 | 0.19510390 | undirected | NA | NA |
| ## | 3733 | ATCG01180 | AT5G17920 | 0.17416076 | undirected | NA | NA |
| ## | 3734 | ATCG01180 | AT5G56030 | 0.31072403 | undirected | NA | NA |
| ## | 3735 | ATCG01180 | AT2G41840 | 0.35663470 | undirected | NA | NA |
| ## | 3736 | ATCG01180 | AT3G60245 | 0.26029988 | undirected | NA | NA |
| ## | 3737 | ATCG01180 | AT2G08665 | 0.16706095 | undirected | NA | NA |
| ## | 3738 | ATCG01180 | AT3G26520 | 0.06608688 | undirected | NA | NA |
| ## | 3739 | ATCG01180 | AT2G42840 | 0.31839313 | undirected | NA | NA |
| ## | 3740 | ATCG01180 | AT1G72370 | 0.28735238 | undirected | NA | NA |
| ## | 3741 | ATCG01180 | AT2G05520 | 0.37219645 | undirected | NA | NA |
| ## | 3742 | ATCG01180 | AT4G22513 | 0.33422050 | undirected | NA | NA |
| ## | 3743 | ATCG01180 | AT4G22530 | 0.32665565 | undirected | NA | NA |
| ## | 3744 | ATCG01180 | ATCG01210 | 0.31629547 | undirected | NA | NA |
| ## | 3745 | ATCG01180 | AT3G25520 | 0.21092488 | undirected | NA | NA |
| ## | 3746 | AT1G07930 | ATCG00950 | 0.25327371 | undirected | NA | NA |
| ## | 3747 | AT1G07930 | AT3G13920 | 0.19253015 | undirected | NA | NA |
| ## | 3748 | AT1G07930 | AT1G28290 | 0.10779008 | undirected | NA | NA |
| ## | 3749 | AT1G07930 | AT1G04270 | 0.27761925 | undirected | NA | NA |
| ## | 3750 | AT1G07930 | AT4G35100 | 0.32889980 | undirected | NA | NA |
| ## | 3751 | AT1G07930 | AT5G48480 | 0.24378336 | undirected | NA | NA |
| ## | 3752 | AT1G07930 | AT1G52400 | 0.08694078 | undirected | NA | NA |
| ## | 3753 | AT1G07930 | AT3G02470 | 0.07572012 | undirected | NA | NA |
| ## | 3754 | AT1G07930 | AT5G15200 | 0.34771254 | undirected | NA | NA |
| ## | 3755 | AT1G07930 | AT5G48485 | 0.20760876 | undirected | NA | NA |
| ## | 3756 | AT1G07930 | AT1G20620 | 0.23728748 | undirected | NA | NA |
| ## | 3757 | AT1G07930 | AT2G27720 | 0.17597460 | undirected | NA | NA |
| ## | 3758 | AT1G07930 | AT5G02870 | 0.15135834 | undirected | NA | NA |
| ## | 3759 | AT1G07930 | AT4G15000 | 0.34429214 | undirected | NA | NA |
| ## | 3760 | AT1G07930 | AT5G20290 | 0.17588540 | undirected | NA | NA |
| ## | 3761 | AT1G07930 | AT4G31700 | 0.12880278 | undirected | NA | NA |
| ## | 3762 | AT1G07930 | AT3G04400 | 0.12741544 | undirected | NA | NA |
| ## | 3763 | AT1G07930 | AT3G02230 | 0.22210273 | undirected | NA | NA |
| ## | 3764 | AT1G07930 | AT1G54410 | 0.32875661 | undirected | NA | NA |
| ## | 3765 | AT1G07930 | AT3G24830 | 0.27668563 | undirected | NA | NA |
| ## | 3766 | AT1G07930 | AT1G48920 | 0.11124143 | undirected | NA | NA |
| ## | 3767 | AT1G07930 | AT3G08770 | 0.18212349 | undirected | NA | NA |
| ## | 3768 | AT1G07930 | AT3G05590 | 0.31734023 | undirected | NA | NA |
| ## | 3769 | AT1G07930 | AT4G38680 | 0.24954045 | undirected | NA | NA |
| ## | 3770 | AT1G07930 | AT3G04840 | 0.13863476 | undirected | NA | NA |
| ## | 3771 | AT1G07930 | AT2G28790 | 0.13165153 | undirected | NA | NA |
| ## | 3772 | AT1G07930 | AT1G70600 | 0.22332898 | undirected | NA | NA |
| ## | 3773 | AT1G07930 | AT4G27090 | 0.27092045 | undirected | NA | NA |
| ## | 3774 | AT1G07930 | AT1G77510 | 0.23654769 | undirected | NA | NA |
| ## | 3775 | AT1G07930 | AT1G70830 | 0.05825299 | undirected | NA | NA |
| ## | 3776 | AT1G07930 | AT1G15690 | 0.08207893 | undirected | NA | NA |
| ## | 3777 | AT1G07930 | AT3G52590 | 0.02850587 | undirected | NA | NA |
| ## | 3778 | AT1G07930 | AT5G07090 | 0.19222996 | undirected | NA | NA |
| ## | 3779 | AT1G07930 | AT5G17920 | 0.06353481 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3780 | AT1G07930 | AT5G56030 | 0.29955479 | undirected | NA | NA |
| ## | 3781 | AT1G07930 | AT2G41840 | 0.22709751 | undirected | NA | NA |
| ## | 3782 | AT1G07930 | AT3G60245 | 0.23929624 | undirected | NA | NA |
| ## | 3783 | AT1G07930 | AT2G08665 | 0.13237375 | undirected | NA | NA |
| ## | 3784 | AT1G07930 | AT2G42840 | 0.17186830 | undirected | NA | NA |
| ## | 3785 | AT1G07930 | AT1G72370 | 0.18576118 | undirected | NA | NA |
| ## | 3786 | AT1G07930 | AT2G05520 | 0.31374040 | undirected | NA | NA |
| ## | 3787 | AT1G07930 | AT4G22513 | 0.27917649 | undirected | NA | NA |
| ## | 3788 | AT1G07930 | AT4G22530 | 0.23973428 | undirected | NA | NA |
| ## | 3789 | AT1G07930 | ATCG01210 | 0.19423165 | undirected | NA | NA |
| ## | 3790 | AT1G07930 | AT3G25520 | 0.14565940 | undirected | NA | NA |
| ## | 3791 | ATCG00950 | AT3G13920 | 0.26002315 | undirected | NA | NA |
| ## | 3792 | ATCG00950 | AT1G28290 | 0.26412037 | undirected | NA | NA |
| ## | 3793 | ATCG00950 | AT1G04270 | 0.34040704 | undirected | NA | NA |
| ## | 3794 | ATCG00950 | AT4G35100 | 0.38701771 | undirected | NA | NA |
| ## | 3795 | ATCG00950 | AT5G48480 | 0.34293266 | undirected | NA | NA |
| ## | 3796 | ATCG00950 | AT1G52400 | 0.21977256 | undirected | NA | NA |
| ## | 3797 | ATCG00950 | AT3G02470 | 0.25594885 | undirected | NA | NA |
| ## | 3798 | ATCG00950 | AT5G15200 | 0.36294560 | undirected | NA | NA |
| ## | 3799 | ATCG00950 | AT5G48485 | 0.42635919 | undirected | NA | NA |
| ## | 3800 | ATCG00950 | AT1G20620 | 0.31326799 | undirected | NA | NA |
| ## | 3801 | ATCG00950 | AT2G27720 | 0.41518573 | undirected | NA | NA |
| ## | 3802 | ATCG00950 | AT5G02870 | 0.22332088 | undirected | NA | NA |
| ## | 3803 | ATCG00950 | AT4G15000 | 0.35485318 | undirected | NA | NA |
| ## | 3804 | ATCG00950 | AT5G20290 | 0.15139568 | undirected | NA | NA |
| ## | 3805 | ATCG00950 | AT4G31700 | 0.13068732 | undirected | NA | NA |
| ## | 3806 | ATCG00950 | AT3G04400 | 0.18458043 | undirected | NA | NA |
| ## | 3807 | ATCG00950 | AT3G02230 | 0.22887137 | undirected | NA | NA |
| ## | 3808 | ATCG00950 | AT1G54410 | 0.37592792 | undirected | NA | NA |
| ## | 3809 | ATCG00950 | AT3G24830 | 0.34714876 | undirected | NA | NA |
| ## | 3810 | ATCG00950 | AT1G48920 | 0.18568987 | undirected | NA | NA |
| ## | 3811 | ATCG00950 | AT3G08770 | 0.40143371 | undirected | NA | NA |
| ## | 3812 | ATCG00950 | AT3G05590 | 0.29758433 | undirected | NA | NA |
| ## | 3813 | ATCG00950 | AT4G38680 | 0.39772181 | undirected | NA | NA |
| ## | 3814 | ATCG00950 | AT3G04840 | 0.43514939 | undirected | NA | NA |
| ## | 3815 | ATCG00950 | AT2G28790 | 0.31675702 | undirected | NA | NA |
| ## | 3816 | ATCG00950 | AT1G70600 | 0.27479630 | undirected | NA | NA |
| ## | 3817 | ATCG00950 | AT4G27090 | 0.36822118 | undirected | NA | NA |
| ## | 3818 | ATCG00950 | AT1G77510 | 0.27679881 | undirected | NA | NA |
| ## | 3819 | ATCG00950 | AT1G70830 | 0.22025564 | undirected | NA | NA |
| ## | 3820 | ATCG00950 | AT1G15690 | 0.19792398 | undirected | NA | NA |
| ## | 3821 | ATCG00950 | AT3G52590 | 0.19328801 | undirected | NA | NA |
| ## | 3822 | ATCG00950 | AT5G07090 | 0.20910240 | undirected | NA | NA |
| ## | 3823 | ATCG00950 | AT5G17920 | 0.23153814 | undirected | NA | NA |
| ## | 3824 | ATCG00950 | AT5G56030 | 0.25967401 | undirected | NA | NA |
| ## | 3825 | ATCG00950 | AT2G41840 | 0.40871191 | undirected | NA | NA |
| ## | 3826 | ATCG00950 | AT3G60245 | 0.30630906 | undirected | NA | NA |
| ## | 3827 | ATCG00950 | AT2G08665 | 0.26553035 | undirected | NA | NA |
| ## | 3828 | ATCG00950 | AT3G26520 | 0.08479429 | undirected | NA | NA |
| ## | 3829 | ATCG00950 | AT2G42840 | 0.43062341 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3830 | ATCG00950 | AT1G72370 | 0.27400353 | undirected | NA | NA |
| ## | 3831 | ATCG00950 | AT2G05520 | 0.35247236 | undirected | NA | NA |
| ## | 3832 | ATCG00950 | AT4G22513 | 0.32105017 | undirected | NA | NA |
| ## | 3833 | ATCG00950 | AT4G22530 | 0.36741168 | undirected | NA | NA |
| ## | 3834 | ATCG00950 | ATCG01210 | 0.41331094 | undirected | NA | NA |
| ## | 3835 | ATCG00950 | AT3G25520 | 0.32534854 | undirected | NA | NA |
| ## | 3836 | AT3G13920 | AT1G28290 | 0.26868970 | undirected | NA | NA |
| ## | 3837 | AT3G13920 | AT1G04270 | 0.25265948 | undirected | NA | NA |
| ## | 3838 | AT3G13920 | AT4G35100 | 0.28915039 | undirected | NA | NA |
| ## | 3839 | AT3G13920 | AT5G48480 | 0.25706977 | undirected | NA | NA |
| ## | 3840 | AT3G13920 | AT1G52400 | 0.28101254 | undirected | NA | NA |
| ## | 3841 | AT3G13920 | AT3G02470 | 0.08451175 | undirected | NA | NA |
| ## | 3842 | AT3G13920 | AT5G15200 | 0.35430013 | undirected | NA | NA |
| ## | 3843 | AT3G13920 | AT5G48485 | 0.22317745 | undirected | NA | NA |
| ## | 3844 | AT3G13920 | AT1G20620 | 0.26037387 | undirected | NA | NA |
| ## | 3845 | AT3G13920 | AT2G27720 | 0.27183186 | undirected | NA | NA |
| ## | 3846 | AT3G13920 | AT5G02870 | 0.28423668 | undirected | NA | NA |
| ## | 3847 | AT3G13920 | AT4G15000 | 0.30626776 | undirected | NA | NA |
| ## | 3848 | AT3G13920 | AT5G20290 | 0.07344840 | undirected | NA | NA |
| ## | 3849 | AT3G13920 | AT4G31700 | 0.21269799 | undirected | NA | NA |
| ## | 3850 | AT3G13920 | AT3G04400 | 0.05584327 | undirected | NA | NA |
| ## | 3851 | AT3G13920 | AT3G02230 | 0.21032990 | undirected | NA | NA |
| ## | 3852 | AT3G13920 | AT1G54410 | 0.28248719 | undirected | NA | NA |
| ## | 3853 | AT3G13920 | AT3G24830 | 0.31969551 | undirected | NA | NA |
| ## | 3854 | AT3G13920 | AT1G48920 | 0.05847137 | undirected | NA | NA |
| ## | 3855 | AT3G13920 | AT3G08770 | 0.26077157 | undirected | NA | NA |
| ## | 3856 | AT3G13920 | AT3G05590 | 0.35489331 | undirected | NA | NA |
| ## | 3857 | AT3G13920 | AT4G38680 | 0.23566372 | undirected | NA | NA |
| ## | 3858 | AT3G13920 | AT3G04840 | 0.18720747 | undirected | NA | NA |
| ## | 3859 | AT3G13920 | AT2G28790 | 0.09800091 | undirected | NA | NA |
| ## | 3860 | AT3G13920 | AT1G70600 | 0.26642911 | undirected | NA | NA |
| ## | 3861 | AT3G13920 | AT4G27090 | 0.23217214 | undirected | NA | NA |
| ## | 3862 | AT3G13920 | AT1G77510 | 0.20645890 | undirected | NA | NA |
| ## | 3863 | AT3G13920 | AT1G70830 | 0.07961693 | undirected | NA | NA |
| ## | 3864 | AT3G13920 | AT1G15690 | 0.25798499 | undirected | NA | NA |
| ## | 3865 | AT3G13920 | AT3G52590 | 0.10067545 | undirected | NA | NA |
| ## | 3866 | AT3G13920 | AT5G07090 | 0.26658583 | undirected | NA | NA |
| ## | 3867 | AT3G13920 | AT5G17920 | 0.06294742 | undirected | NA | NA |
| ## | 3868 | AT3G13920 | AT5G56030 | 0.21945514 | undirected | NA | NA |
| ## | 3869 | AT3G13920 | AT2G41840 | 0.25548152 | undirected | NA | NA |
| ## | 3870 | AT3G13920 | AT3G60245 | 0.22387000 | undirected | NA | NA |
| ## | 3871 | AT3G13920 | AT2G08665 | 0.29922730 | undirected | NA | NA |
| ## | 3872 | AT3G13920 | AT2G42840 | 0.20746879 | undirected | NA | NA |
| ## | 3873 | AT3G13920 | AT1G72370 | 0.10998334 | undirected | NA | NA |
| ## | 3874 | AT3G13920 | AT2G05520 | 0.27279460 | undirected | NA | NA |
| ## | 3875 | AT3G13920 | AT4G22513 | 0.26596094 | undirected | NA | NA |
| ## | 3876 | AT3G13920 | AT4G22530 | 0.26234510 | undirected | NA | NA |
| ## | 3877 | AT3G13920 | ATCG01210 | 0.23550778 | undirected | NA | NA |
| ## | 3878 | AT3G13920 | AT3G25520 | 0.30658617 | undirected | NA | NA |
| ## | 3879 | AT1G28290 | AT1G04270 | 0.23759729 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3880 | AT1G28290 | AT4G35100 | 0.30449638 | undirected | NA | NA |
| ## | 3881 | AT1G28290 | AT5G48480 | 0.22623561 | undirected | NA | NA |
| ## | 3882 | AT1G28290 | AT1G52400 | 0.16683651 | undirected | NA | NA |
| ## | 3883 | AT1G28290 | AT3G02470 | 0.06171353 | undirected | NA | NA |
| ## | 3884 | AT1G28290 | AT5G15200 | 0.34517847 | undirected | NA | NA |
| ## | 3885 | AT1G28290 | AT5G48485 | 0.18519232 | undirected | NA | NA |
| ## | 3886 | AT1G28290 | AT1G20620 | 0.19458180 | undirected | NA | NA |
| ## | 3887 | AT1G28290 | AT2G27720 | 0.22267255 | undirected | NA | NA |
| ## | 3888 | AT1G28290 | AT5G02870 | 0.22214345 | undirected | NA | NA |
| ## | 3889 | AT1G28290 | AT4G15000 | 0.29911154 | undirected | NA | NA |
| ## | 3890 | AT1G28290 | AT5G20290 | 0.03975663 | undirected | NA | NA |
| ## | 3891 | AT1G28290 | AT4G31700 | 0.12534359 | undirected | NA | NA |
| ## | 3892 | AT1G28290 | AT3G04400 | 0.05161361 | undirected | NA | NA |
| ## | 3893 | AT1G28290 | AT3G02230 | 0.18944043 | undirected | NA | NA |
| ## | 3894 | AT1G28290 | AT1G54410 | 0.27769421 | undirected | NA | NA |
| ## | 3895 | AT1G28290 | AT3G24830 | 0.33861354 | undirected | NA | NA |
| ## | 3896 | AT1G28290 | AT1G48920 | 0.06061263 | undirected | NA | NA |
| ## | 3897 | AT1G28290 | AT3G08770 | 0.15451116 | undirected | NA | NA |
| ## | 3898 | AT1G28290 | AT3G05590 | 0.34375332 | undirected | NA | NA |
| ## | 3899 | AT1G28290 | AT4G38680 | 0.19697243 | undirected | NA | NA |
| ## | 3900 | AT1G28290 | AT3G04840 | 0.14320745 | undirected | NA | NA |
| ## | 3901 | AT1G28290 | AT2G28790 | 0.06993978 | undirected | NA | NA |
| ## | 3902 | AT1G28290 | AT1G70600 | 0.19340998 | undirected | NA | NA |
| ## | 3903 | AT1G28290 | AT4G27090 | 0.20648965 | undirected | NA | NA |
| ## | 3904 | AT1G28290 | AT1G77510 | 0.15875578 | undirected | NA | NA |
| ## | 3905 | AT1G28290 | AT1G70830 | 0.05557814 | undirected | NA | NA |
| ## | 3906 | AT1G28290 | AT1G15690 | 0.13417176 | undirected | NA | NA |
| ## | 3907 | AT1G28290 | AT3G52590 | 0.06326569 | undirected | NA | NA |
| ## | 3908 | AT1G28290 | AT5G07090 | 0.22680540 | undirected | NA | NA |
| ## | 3909 | AT1G28290 | AT5G17920 | 0.05883178 | undirected | NA | NA |
| ## | 3910 | AT1G28290 | AT5G56030 | 0.20349781 | undirected | NA | NA |
| ## | 3911 | AT1G28290 | AT2G41840 | 0.28986872 | undirected | NA | NA |
| ## | 3912 | AT1G28290 | AT3G60245 | 0.14197968 | undirected | NA | NA |
| ## | 3913 | AT1G28290 | AT2G08665 | 0.21434938 | undirected | NA | NA |
| ## | 3914 | AT1G28290 | AT2G42840 | 0.14604105 | undirected | NA | NA |
| ## | 3915 | AT1G28290 | AT1G72370 | 0.07087011 | undirected | NA | NA |
| ## | 3916 | AT1G28290 | AT2G05520 | 0.26375034 | undirected | NA | NA |
| ## | 3917 | AT1G28290 | AT4G22513 | 0.26884055 | undirected | NA | NA |
| ## | 3918 | AT1G28290 | AT4G22530 | 0.23762807 | undirected | NA | NA |
| ## | 3919 | AT1G28290 | ATCG01210 | 0.22332772 | undirected | NA | NA |
| ## | 3920 | AT1G28290 | AT3G25520 | 0.17809279 | undirected | NA | NA |
| ## | 3921 | AT1G04270 | AT4G35100 | 0.38283024 | undirected | NA | NA |
| ## | 3922 | AT1G04270 | AT5G48480 | 0.31525590 | undirected | NA | NA |
| ## | 3923 | AT1G04270 | AT1G52400 | 0.17449370 | undirected | NA | NA |
| ## | 3924 | AT1G04270 | AT3G02470 | 0.17074322 | undirected | NA | NA |
| ## | 3925 | AT1G04270 | AT5G15200 | 0.38577445 | undirected | NA | NA |
| ## | 3926 | AT1G04270 | AT5G48485 | 0.32603028 | undirected | NA | NA |
| ## | 3927 | AT1G04270 | AT1G20620 | 0.30562828 | undirected | NA | NA |
| ## | 3928 | AT1G04270 | AT2G27720 | 0.31609634 | undirected | NA | NA |
| ## | 3929 | AT1G04270 | AT5G02870 | 0.20256945 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3930 | AT1G04270 | AT4G15000 | 0.37151888 | undirected | NA | NA |
| ## | 3931 | AT1G04270 | AT5G20290 | 0.16665222 | undirected | NA | NA |
| ## | 3932 | AT1G04270 | AT4G31700 | 0.17282594 | undirected | NA | NA |
| ## | 3933 | AT1G04270 | AT3G04400 | 0.17169393 | undirected | NA | NA |
| ## | 3934 | AT1G04270 | AT3G02230 | 0.23563545 | undirected | NA | NA |
| ## | 3935 | AT1G04270 | AT1G54410 | 0.36828532 | undirected | NA | NA |
| ## | 3936 | AT1G04270 | AT3G24830 | 0.35110990 | undirected | NA | NA |
| ## | 3937 | AT1G04270 | AT1G48920 | 0.17439720 | undirected | NA | NA |
| ## | 3938 | AT1G04270 | AT3G08770 | 0.33458624 | undirected | NA | NA |
| ## | 3939 | AT1G04270 | AT3G05590 | 0.34204325 | undirected | NA | NA |
| ## | 3940 | AT1G04270 | AT4G38680 | 0.33041380 | undirected | NA | NA |
| ## | 3941 | AT1G04270 | AT3G04840 | 0.31806292 | undirected | NA | NA |
| ## | 3942 | AT1G04270 | AT2G28790 | 0.23521257 | undirected | NA | NA |
| ## | 3943 | AT1G04270 | AT1G70600 | 0.25124829 | undirected | NA | NA |
| ## | 3944 | AT1G04270 | AT4G27090 | 0.31833469 | undirected | NA | NA |
| ## | 3945 | AT1G04270 | AT1G77510 | 0.27540162 | undirected | NA | NA |
| ## | 3946 | AT1G04270 | AT1G70830 | 0.13786037 | undirected | NA | NA |
| ## | 3947 | AT1G04270 | AT1G15690 | 0.17721543 | undirected | NA | NA |
| ## | 3948 | AT1G04270 | AT3G52590 | 0.10618312 | undirected | NA | NA |
| ## | 3949 | AT1G04270 | AT5G07090 | 0.21960062 | undirected | NA | NA |
| ## | 3950 | AT1G04270 | AT5G17920 | 0.15323720 | undirected | NA | NA |
| ## | 3951 | AT1G04270 | AT5G56030 | 0.28258915 | undirected | NA | NA |
| ## | 3952 | AT1G04270 | AT2G41840 | 0.34359504 | undirected | NA | NA |
| ## | 3953 | AT1G04270 | AT3G60245 | 0.30743808 | undirected | NA | NA |
| ## | 3954 | AT1G04270 | AT2G08665 | 0.27021155 | undirected | NA | NA |
| ## | 3955 | AT1G04270 | AT3G26520 | 0.04326313 | undirected | NA | NA |
| ## | 3956 | AT1G04270 | AT2G42840 | 0.33909602 | undirected | NA | NA |
| ## | 3957 | AT1G04270 | AT1G72370 | 0.25103209 | undirected | NA | NA |
| ## | 3958 | AT1G04270 | AT2G05520 | 0.34907469 | undirected | NA | NA |
| ## | 3959 | AT1G04270 | AT4G22513 | 0.32336616 | undirected | NA | NA |
| ## | 3960 | AT1G04270 | AT4G22530 | 0.30773151 | undirected | NA | NA |
| ## | 3961 | AT1G04270 | ATCG01210 | 0.30115833 | undirected | NA | NA |
| ## | 3962 | AT1G04270 | AT3G25520 | 0.28694986 | undirected | NA | NA |
| ## | 3963 | AT4G35100 | AT5G48480 | 0.38616924 | undirected | NA | NA |
| ## | 3964 | AT4G35100 | AT1G52400 | 0.23607896 | undirected | NA | NA |
| ## | 3965 | AT4G35100 | AT3G02470 | 0.21707798 | undirected | NA | NA |
| ## | 3966 | AT4G35100 | AT5G15200 | 0.36585153 | undirected | NA | NA |
| ## | 3967 | AT4G35100 | AT5G48485 | 0.40926958 | undirected | NA | NA |
| ## | 3968 | AT4G35100 | AT1G20620 | 0.36426642 | undirected | NA | NA |
| ## | 3969 | AT4G35100 | AT2G27720 | 0.38600684 | undirected | NA | NA |
| ## | 3970 | AT4G35100 | AT5G02870 | 0.26364553 | undirected | NA | NA |
| ## | 3971 | AT4G35100 | AT4G15000 | 0.33837929 | undirected | NA | NA |
| ## | 3972 | AT4G35100 | AT5G20290 | 0.20287793 | undirected | NA | NA |
| ## | 3973 | AT4G35100 | AT4G31700 | 0.20146550 | undirected | NA | NA |
| ## | 3974 | AT4G35100 | AT3G04400 | 0.16519643 | undirected | NA | NA |
| ## | 3975 | AT4G35100 | AT3G02230 | 0.29417038 | undirected | NA | NA |
| ## | 3976 | AT4G35100 | AT1G54410 | 0.37114514 | undirected | NA | NA |
| ## | 3977 | AT4G35100 | AT3G24830 | 0.35282608 | undirected | NA | NA |
| ## | 3978 | AT4G35100 | AT1G48920 | 0.15289737 | undirected | NA | NA |
| ## | 3979 | AT4G35100 | AT3G08770 | 0.39394567 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 3980 | AT4G35100 | AT3G05590 | 0.33839889 | undirected | NA | NA |
| ## | 3981 | AT4G35100 | AT4G38680 | 0.41193869 | undirected | NA | NA |
| ## | 3982 | AT4G35100 | AT3G04840 | 0.37931860 | undirected | NA | NA |
| ## | 3983 | AT4G35100 | AT2G28790 | 0.26214939 | undirected | NA | NA |
| ## | 3984 | AT4G35100 | AT1G70600 | 0.32536833 | undirected | NA | NA |
| ## | 3985 | AT4G35100 | AT4G27090 | 0.39930345 | undirected | NA | NA |
| ## | 3986 | AT4G35100 | AT1G77510 | 0.35491678 | undirected | NA | NA |
| ## | 3987 | AT4G35100 | AT1G70830 | 0.20853284 | undirected | NA | NA |
| ## | 3988 | AT4G35100 | AT1G15690 | 0.24091975 | undirected | NA | NA |
| ## | 3989 | AT4G35100 | AT3G52590 | 0.18209284 | undirected | NA | NA |
| ## | 3990 | AT4G35100 | AT5G07090 | 0.25476591 | undirected | NA | NA |
| ## | 3991 | AT4G35100 | AT5G17920 | 0.20527390 | undirected | NA | NA |
| ## | 3992 | AT4G35100 | AT5G56030 | 0.30614949 | undirected | NA | NA |
| ## | 3993 | AT4G35100 | AT2G41840 | 0.36844584 | undirected | NA | NA |
| ## | 3994 | AT4G35100 | AT3G60245 | 0.37104118 | undirected | NA | NA |
| ## | 3995 | AT4G35100 | AT2G08665 | 0.29738477 | undirected | NA | NA |
| ## | 3996 | AT4G35100 | AT3G26520 | 0.04529320 | undirected | NA | NA |
| ## | 3997 | AT4G35100 | AT2G42840 | 0.40515463 | undirected | NA | NA |
| ## | 3998 | AT4G35100 | AT1G72370 | 0.24529555 | undirected | NA | NA |
| ## | 3999 | AT4G35100 | AT2G05520 | 0.34847611 | undirected | NA | NA |
| ## | 4000 | AT4G35100 | AT4G22513 | 0.32535425 | undirected | NA | NA |
| ## | 4001 | AT4G35100 | AT4G22530 | 0.37531938 | undirected | NA | NA |
| ## | 4002 | AT4G35100 | ATCG01210 | 0.38583819 | undirected | NA | NA |
| ## | 4003 | AT4G35100 | AT3G25520 | 0.32264806 | undirected | NA | NA |
| ## | 4004 | AT5G48480 | AT1G52400 | 0.15374974 | undirected | NA | NA |
| ## | 4005 | AT5G48480 | AT3G02470 | 0.14408815 | undirected | NA | NA |
| ## | 4006 | AT5G48480 | AT5G15200 | 0.38674580 | undirected | NA | NA |
| ## | 4007 | AT5G48480 | AT5G48485 | 0.29314243 | undirected | NA | NA |
| ## | 4008 | AT5G48480 | AT1G20620 | 0.27839132 | undirected | NA | NA |
| ## | 4009 | AT5G48480 | AT2G27720 | 0.29098636 | undirected | NA | NA |
| ## | 4010 | AT5G48480 | AT5G02870 | 0.19953143 | undirected | NA | NA |
| ## | 4011 | AT5G48480 | AT4G15000 | 0.37100287 | undirected | NA | NA |
| ## | 4012 | AT5G48480 | AT5G20290 | 0.13001549 | undirected | NA | NA |
| ## | 4013 | AT5G48480 | AT4G31700 | 0.16272812 | undirected | NA | NA |
| ## | 4014 | AT5G48480 | AT3G04400 | 0.15789217 | undirected | NA | NA |
| ## | 4015 | AT5G48480 | AT3G02230 | 0.22588339 | undirected | NA | NA |
| ## | 4016 | AT5G48480 | AT1G54410 | 0.36849130 | undirected | NA | NA |
| ## | 4017 | AT5G48480 | AT3G24830 | 0.35374358 | undirected | NA | NA |
| ## | 4018 | AT5G48480 | AT1G48920 | 0.15803743 | undirected | NA | NA |
| ## | 4019 | AT5G48480 | AT3G08770 | 0.29098849 | undirected | NA | NA |
| ## | 4020 | AT5G48480 | AT3G05590 | 0.34426291 | undirected | NA | NA |
| ## | 4021 | AT5G48480 | AT4G38680 | 0.29437983 | undirected | NA | NA |
| ## | 4022 | AT5G48480 | AT3G04840 | 0.29272033 | undirected | NA | NA |
| ## | 4023 | AT5G48480 | AT2G28790 | 0.19951106 | undirected | NA | NA |
| ## | 4024 | AT5G48480 | AT1G70600 | 0.23535599 | undirected | NA | NA |
| ## | 4025 | AT5G48480 | AT4G27090 | 0.30362317 | undirected | NA | NA |
| ## | 4026 | AT5G48480 | AT1G77510 | 0.25118862 | undirected | NA | NA |
| ## | 4027 | AT5G48480 | AT1G70830 | 0.11788895 | undirected | NA | NA |
| ## | 4028 | AT5G48480 | AT1G15690 | 0.15211365 | undirected | NA | NA |
| ## | 4029 | AT5G48480 | AT3G52590 | 0.08937802 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4030 | AT5G48480 | AT5G07090 | 0.21683260 | undirected | NA | NA |
| ## | 4031 | AT5G48480 | AT5G17920 | 0.14010564 | undirected | NA | NA |
| ## | 4032 | AT5G48480 | AT5G56030 | 0.27290642 | undirected | NA | NA |
| ## | 4033 | AT5G48480 | AT2G41840 | 0.35033579 | undirected | NA | NA |
| ## | 4034 | AT5G48480 | AT3G60245 | 0.28038890 | undirected | NA | NA |
| ## | 4035 | AT5G48480 | AT2G08665 | 0.26320241 | undirected | NA | NA |
| ## | 4036 | AT5G48480 | AT3G26520 | 0.03439487 | undirected | NA | NA |
| ## | 4037 | AT5G48480 | AT2G42840 | 0.30130582 | undirected | NA | NA |
| ## | 4038 | AT5G48480 | AT1G72370 | 0.21139738 | undirected | NA | NA |
| ## | 4039 | AT5G48480 | AT2G05520 | 0.34143528 | undirected | NA | NA |
| ## | 4040 | AT5G48480 | AT4G22513 | 0.31908688 | undirected | NA | NA |
| ## | 4041 | AT5G48480 | AT4G22530 | 0.30519002 | undirected | NA | NA |
| ## | 4042 | AT5G48480 | ATCG01210 | 0.29532706 | undirected | NA | NA |
| ## | 4043 | AT5G48480 | AT3G25520 | 0.26135714 | undirected | NA | NA |
| ## | 4044 | AT1G52400 | AT3G02470 | 0.04557119 | undirected | NA | NA |
| ## | 4045 | AT1G52400 | AT5G15200 | 0.30443850 | undirected | NA | NA |
| ## | 4046 | AT1G52400 | AT5G48485 | 0.12990425 | undirected | NA | NA |
| ## | 4047 | AT1G52400 | AT1G20620 | 0.14257506 | undirected | NA | NA |
| ## | 4048 | AT1G52400 | AT2G27720 | 0.17110591 | undirected | NA | NA |
| ## | 4049 | AT1G52400 | AT5G02870 | 0.23813284 | undirected | NA | NA |
| ## | 4050 | AT1G52400 | AT4G15000 | 0.24951441 | undirected | NA | NA |
| ## | 4051 | AT1G52400 | AT5G20290 | 0.02735872 | undirected | NA | NA |
| ## | 4052 | AT1G52400 | AT4G31700 | 0.11625329 | undirected | NA | NA |
| ## | 4053 | AT1G52400 | AT3G02230 | 0.18171695 | undirected | NA | NA |
| ## | 4054 | AT1G52400 | AT1G54410 | 0.23082412 | undirected | NA | NA |
| ## | 4055 | AT1G52400 | AT3G24830 | 0.28474047 | undirected | NA | NA |
| ## | 4056 | AT1G52400 | AT3G08770 | 0.13856099 | undirected | NA | NA |
| ## | 4057 | AT1G52400 | AT3G05590 | 0.31217326 | undirected | NA | NA |
| ## | 4058 | AT1G52400 | AT4G38680 | 0.14006856 | undirected | NA | NA |
| ## | 4059 | AT1G52400 | AT3G04840 | 0.09506759 | undirected | NA | NA |
| ## | 4060 | AT1G52400 | AT2G28790 | 0.04141494 | undirected | NA | NA |
| ## | 4061 | AT1G52400 | AT1G70600 | 0.19303737 | undirected | NA | NA |
| ## | 4062 | AT1G52400 | AT4G27090 | 0.15008282 | undirected | NA | NA |
| ## | 4063 | AT1G52400 | AT1G77510 | 0.10622299 | undirected | NA | NA |
| ## | 4064 | AT1G52400 | AT1G70830 | 0.04780987 | undirected | NA | NA |
| ## | 4065 | AT1G52400 | AT1G15690 | 0.17510034 | undirected | NA | NA |
| ## | 4066 | AT1G52400 | AT3G52590 | 0.07439004 | undirected | NA | NA |
| ## | 4067 | AT1G52400 | AT5G07090 | 0.25910123 | undirected | NA | NA |
| ## | 4068 | AT1G52400 | AT5G17920 | 0.02950472 | undirected | NA | NA |
| ## | 4069 | AT1G52400 | AT5G56030 | 0.17676544 | undirected | NA | NA |
| ## | 4070 | AT1G52400 | AT2G41840 | 0.22613078 | undirected | NA | NA |
| ## | 4071 | AT1G52400 | AT3G60245 | 0.10579010 | undirected | NA | NA |
| ## | 4072 | AT1G52400 | AT2G08665 | 0.16971912 | undirected | NA | NA |
| ## | 4073 | AT1G52400 | AT2G42840 | 0.10414177 | undirected | NA | NA |
| ## | 4074 | AT1G52400 | AT1G72370 | 0.03968696 | undirected | NA | NA |
| ## | 4075 | AT1G52400 | AT2G05520 | 0.22857164 | undirected | NA | NA |
| ## | 4076 | AT1G52400 | AT4G22513 | 0.22467161 | undirected | NA | NA |
| ## | 4077 | AT1G52400 | AT4G22530 | 0.20800396 | undirected | NA | NA |
| ## | 4078 | AT1G52400 | ATCG01210 | 0.17245146 | undirected | NA | NA |
| ## | 4079 | AT1G52400 | AT3G25520 | 0.18606995 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4080 | AT3G02470 | AT5G15200 | 0.14064374 | undirected | NA | NA |
| ## | 4081 | AT3G02470 | AT5G48485 | 0.28261575 | undirected | NA | NA |
| ## | 4082 | AT3G02470 | AT1G20620 | 0.10604826 | undirected | NA | NA |
| ## | 4083 | AT3G02470 | AT2G27720 | 0.19123181 | undirected | NA | NA |
| ## | 4084 | AT3G02470 | AT5G02870 | 0.05383385 | undirected | NA | NA |
| ## | 4085 | AT3G02470 | AT4G15000 | 0.16134730 | undirected | NA | NA |
| ## | 4086 | AT3G02470 | AT5G20290 | 0.06353275 | undirected | NA | NA |
| ## | 4087 | AT3G02470 | AT3G04400 | 0.07247976 | undirected | NA | NA |
| ## | 4088 | AT3G02470 | AT3G02230 | 0.11812008 | undirected | NA | NA |
| ## | 4089 | AT3G02470 | AT1G54410 | 0.20264696 | undirected | NA | NA |
| ## | 4090 | AT3G02470 | AT3G24830 | 0.16293207 | undirected | NA | NA |
| ## | 4091 | AT3G02470 | AT1G48920 | 0.08388394 | undirected | NA | NA |
| ## | 4092 | AT3G02470 | AT3G08770 | 0.17507594 | undirected | NA | NA |
| ## | 4093 | AT3G02470 | AT3G05590 | 0.08624985 | undirected | NA | NA |
| ## | 4094 | AT3G02470 | AT4G38680 | 0.24139882 | undirected | NA | NA |
| ## | 4095 | AT3G02470 | AT3G04840 | 0.20715675 | undirected | NA | NA |
| ## | 4096 | AT3G02470 | AT2G28790 | 0.15629273 | undirected | NA | NA |
| ## | 4097 | AT3G02470 | AT1G70600 | 0.09011953 | undirected | NA | NA |
| ## | 4098 | AT3G02470 | AT4G27090 | 0.23637829 | undirected | NA | NA |
| ## | 4099 | AT3G02470 | AT1G77510 | 0.09894908 | undirected | NA | NA |
| ## | 4100 | AT3G02470 | AT1G70830 | 0.13922206 | undirected | NA | NA |
| ## | 4101 | AT3G02470 | AT1G15690 | 0.02987954 | undirected | NA | NA |
| ## | 4102 | AT3G02470 | AT3G52590 | 0.08772627 | undirected | NA | NA |
| ## | 4103 | AT3G02470 | AT5G07090 | 0.05665531 | undirected | NA | NA |
| ## | 4104 | AT3G02470 | AT5G17920 | 0.14249239 | undirected | NA | NA |
| ## | 4105 | AT3G02470 | AT5G56030 | 0.13274354 | undirected | NA | NA |
| ## | 4106 | AT3G02470 | AT2G41840 | 0.30160195 | undirected | NA | NA |
| ## | 4107 | AT3G02470 | AT3G60245 | 0.09840070 | undirected | NA | NA |
| ## | 4108 | AT3G02470 | AT2G08665 | 0.02569887 | undirected | NA | NA |
| ## | 4109 | AT3G02470 | AT3G26520 | 0.13720215 | undirected | NA | NA |
| ## | 4110 | AT3G02470 | AT2G42840 | 0.27240651 | undirected | NA | NA |
| ## | 4111 | AT3G02470 | AT1G72370 | 0.08804994 | undirected | NA | NA |
| ## | 4112 | AT3G02470 | AT2G05520 | 0.20106679 | undirected | NA | NA |
| ## | 4113 | AT3G02470 | AT4G22513 | 0.16747954 | undirected | NA | NA |
| ## | 4114 | AT3G02470 | AT4G22530 | 0.21853654 | undirected | NA | NA |
| ## | 4115 | AT3G02470 | ATCG01210 | 0.29431463 | undirected | NA | NA |
| ## | 4116 | AT3G02470 | AT3G25520 | 0.05515473 | undirected | NA | NA |
| ## | 4117 | AT5G15200 | AT5G48485 | 0.33798043 | undirected | NA | NA |
| ## | 4118 | AT5G15200 | AT1G20620 | 0.38554669 | undirected | NA | NA |
| ## | 4119 | AT5G15200 | AT2G27720 | 0.35069193 | undirected | NA | NA |
| ## | 4120 | AT5G15200 | AT5G02870 | 0.34539585 | undirected | NA | NA |
| ## | 4121 | AT5G15200 | AT4G15000 | 0.37646881 | undirected | NA | NA |
| ## | 4122 | AT5G15200 | AT5G20290 | 0.18916587 | undirected | NA | NA |
| ## | 4123 | AT5G15200 | AT4G31700 | 0.29785279 | undirected | NA | NA |
| ## | 4124 | AT5G15200 | AT3G04400 | 0.10681251 | undirected | NA | NA |
| ## | 4125 | AT5G15200 | AT3G02230 | 0.33921468 | undirected | NA | NA |
| ## | 4126 | AT5G15200 | AT1G54410 | 0.38079288 | undirected | NA | NA |
| ## | 4127 | AT5G15200 | AT3G24830 | 0.34408250 | undirected | NA | NA |
| ## | 4128 | AT5G15200 | AT1G48920 | 0.10029732 | undirected | NA | NA |
| ## | 4129 | AT5G15200 | AT3G08770 | 0.37448738 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4130 | AT5G15200 | AT3G05590 | 0.36771357 | undirected | NA | NA |
| ## | 4131 | AT5G15200 | AT4G38680 | 0.37147847 | undirected | NA | NA |
| ## | 4132 | AT5G15200 | AT3G04840 | 0.27615754 | undirected | NA | NA |
| ## | 4133 | AT5G15200 | AT2G28790 | 0.17162723 | undirected | NA | NA |
| ## | 4134 | AT5G15200 | AT1G70600 | 0.37581129 | undirected | NA | NA |
| ## | 4135 | AT5G15200 | AT4G27090 | 0.37477308 | undirected | NA | NA |
| ## | 4136 | AT5G15200 | AT1G77510 | 0.36357083 | undirected | NA | NA |
| ## | 4137 | AT5G15200 | AT1G70830 | 0.14104290 | undirected | NA | NA |
| ## | 4138 | AT5G15200 | AT1G15690 | 0.32252767 | undirected | NA | NA |
| ## | 4139 | AT5G15200 | AT3G52590 | 0.14384208 | undirected | NA | NA |
| ## | 4140 | AT5G15200 | AT5G07090 | 0.33862206 | undirected | NA | NA |
| ## | 4141 | AT5G15200 | AT5G17920 | 0.11667421 | undirected | NA | NA |
| ## | 4142 | AT5G15200 | AT5G56030 | 0.34322421 | undirected | NA | NA |
| ## | 4143 | AT5G15200 | AT2G41840 | 0.33284230 | undirected | NA | NA |
| ## | 4144 | AT5G15200 | AT3G60245 | 0.37335475 | undirected | NA | NA |
| ## | 4145 | AT5G15200 | AT2G08665 | 0.35413470 | undirected | NA | NA |
| ## | 4146 | AT5G15200 | AT2G42840 | 0.32309898 | undirected | NA | NA |
| ## | 4147 | AT5G15200 | AT1G72370 | 0.19221995 | undirected | NA | NA |
| ## | 4148 | AT5G15200 | AT2G05520 | 0.36653541 | undirected | NA | NA |
| ## | 4149 | AT5G15200 | AT4G22513 | 0.35018330 | undirected | NA | NA |
| ## | 4150 | AT5G15200 | AT4G22530 | 0.36858425 | undirected | NA | NA |
| ## | 4151 | AT5G15200 | ATCG01210 | 0.32976417 | undirected | NA | NA |
| ## | 4152 | AT5G15200 | AT3G25520 | 0.35318007 | undirected | NA | NA |
| ## | 4153 | AT5G48485 | AT1G20620 | 0.24263331 | undirected | NA | NA |
| ## | 4154 | AT5G48485 | AT2G27720 | 0.34490943 | undirected | NA | NA |
| ## | 4155 | AT5G48485 | AT5G02870 | 0.15541146 | undirected | NA | NA |
| ## | 4156 | AT5G48485 | AT4G15000 | 0.34906700 | undirected | NA | NA |
| ## | 4157 | AT5G48485 | AT5G20290 | 0.14864401 | undirected | NA | NA |
| ## | 4158 | AT5G48485 | AT4G31700 | 0.07401226 | undirected | NA | NA |
| ## | 4159 | AT5G48485 | AT3G04400 | 0.22266854 | undirected | NA | NA |
| ## | 4160 | AT5G48485 | AT3G02230 | 0.21238421 | undirected | NA | NA |
| ## | 4161 | AT5G48485 | AT1G54410 | 0.39351650 | undirected | NA | NA |
| ## | 4162 | AT5G48485 | AT3G24830 | 0.33101238 | undirected | NA | NA |
| ## | 4163 | AT5G48485 | AT1G48920 | 0.21799078 | undirected | NA | NA |
| ## | 4164 | AT5G48485 | AT3G08770 | 0.32702667 | undirected | NA | NA |
| ## | 4165 | AT5G48485 | AT3G05590 | 0.25112296 | undirected | NA | NA |
| ## | 4166 | AT5G48485 | AT4G38680 | 0.36517778 | undirected | NA | NA |
| ## | 4167 | AT5G48485 | AT3G04840 | 0.43209454 | undirected | NA | NA |
| ## | 4168 | AT5G48485 | AT2G28790 | 0.35629813 | undirected | NA | NA |
| ## | 4169 | AT5G48485 | AT1G70600 | 0.21693031 | undirected | NA | NA |
| ## | 4170 | AT5G48485 | AT4G27090 | 0.35693829 | undirected | NA | NA |
| ## | 4171 | AT5G48485 | AT1G77510 | 0.22904327 | undirected | NA | NA |
| ## | 4172 | AT5G48485 | AT1G70830 | 0.23548665 | undirected | NA | NA |
| ## | 4173 | AT5G48485 | AT1G15690 | 0.11126842 | undirected | NA | NA |
| ## | 4174 | AT5G48485 | AT3G52590 | 0.16308918 | undirected | NA | NA |
| ## | 4175 | AT5G48485 | AT5G07090 | 0.16611235 | undirected | NA | NA |
| ## | 4176 | AT5G48485 | AT5G17920 | 0.28255597 | undirected | NA | NA |
| ## | 4177 | AT5G48485 | AT5G56030 | 0.25873143 | undirected | NA | NA |
| ## | 4178 | AT5G48485 | AT2G41840 | 0.45765462 | undirected | NA | NA |
| ## | 4179 | AT5G48485 | AT3G60245 | 0.25604154 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4180 | AT5G48485 | AT2G08665 | 0.18042841 | undirected | NA | NA |
| ## | 4181 | AT5G48485 | AT3G26520 | 0.10922893 | undirected | NA | NA |
| ## | 4182 | AT5G48485 | AT2G42840 | 0.40397784 | undirected | NA | NA |
| ## | 4183 | AT5G48485 | AT1G72370 | 0.28144724 | undirected | NA | NA |
| ## | 4184 | AT5G48485 | AT2G05520 | 0.36020342 | undirected | NA | NA |
| ## | 4185 | AT5G48485 | AT4G22513 | 0.31848205 | undirected | NA | NA |
| ## | 4186 | AT5G48485 | AT4G22530 | 0.35978547 | undirected | NA | NA |
| ## | 4187 | AT5G48485 | ATCG01210 | 0.41381557 | undirected | NA | NA |
| ## | 4188 | AT5G48485 | AT3G25520 | 0.23522542 | undirected | NA | NA |
| ## | 4189 | AT1G20620 | AT2G27720 | 0.24207411 | undirected | NA | NA |
| ## | 4190 | AT1G20620 | AT5G02870 | 0.20638918 | undirected | NA | NA |
| ## | 4191 | AT1G20620 | AT4G15000 | 0.36727064 | undirected | NA | NA |
| ## | 4192 | AT1G20620 | AT5G20290 | 0.12573062 | undirected | NA | NA |
| ## | 4193 | AT1G20620 | AT4G31700 | 0.17294968 | undirected | NA | NA |
| ## | 4194 | AT1G20620 | AT3G04400 | 0.13285702 | undirected | NA | NA |
| ## | 4195 | AT1G20620 | AT3G02230 | 0.22291998 | undirected | NA | NA |
| ## | 4196 | AT1G20620 | AT1G54410 | 0.35662289 | undirected | NA | NA |
| ## | 4197 | AT1G20620 | AT3G24830 | 0.33640481 | undirected | NA | NA |
| ## | 4198 | AT1G20620 | AT1G48920 | 0.13290003 | undirected | NA | NA |
| ## | 4199 | AT1G20620 | AT3G08770 | 0.25052170 | undirected | NA | NA |
| ## | 4200 | AT1G20620 | AT3G05590 | 0.35317186 | undirected | NA | NA |
| ## | 4201 | AT1G20620 | AT4G38680 | 0.26986183 | undirected | NA | NA |
| ## | 4202 | AT1G20620 | AT3G04840 | 0.22384240 | undirected | NA | NA |
| ## | 4203 | AT1G20620 | AT2G28790 | 0.15386594 | undirected | NA | NA |
| ## | 4204 | AT1G20620 | AT1G70600 | 0.24131657 | undirected | NA | NA |
| ## | 4205 | AT1G20620 | AT4G27090 | 0.28518601 | undirected | NA | NA |
| ## | 4206 | AT1G20620 | AT1G77510 | 0.22654666 | undirected | NA | NA |
| ## | 4207 | AT1G20620 | AT1G70830 | 0.08435985 | undirected | NA | NA |
| ## | 4208 | AT1G20620 | AT1G15690 | 0.14465761 | undirected | NA | NA |
| ## | 4209 | AT1G20620 | AT3G52590 | 0.06138878 | undirected | NA | NA |
| ## | 4210 | AT1G20620 | AT5G07090 | 0.22919566 | undirected | NA | NA |
| ## | 4211 | AT1G20620 | AT5G17920 | 0.09609267 | undirected | NA | NA |
| ## | 4212 | AT1G20620 | AT5G56030 | 0.27398060 | undirected | NA | NA |
| ## | 4213 | AT1G20620 | AT2G41840 | 0.30439787 | undirected | NA | NA |
| ## | 4214 | AT1G20620 | AT3G60245 | 0.25733498 | undirected | NA | NA |
| ## | 4215 | AT1G20620 | AT2G08665 | 0.24527138 | undirected | NA | NA |
| ## | 4216 | AT1G20620 | AT3G26520 | 0.02351181 | undirected | NA | NA |
| ## | 4217 | AT1G20620 | AT2G42840 | 0.24165379 | undirected | NA | NA |
| ## | 4218 | AT1G20620 | AT1G72370 | 0.18506028 | undirected | NA | NA |
| ## | 4219 | AT1G20620 | AT2G05520 | 0.33174108 | undirected | NA | NA |
| ## | 4220 | AT1G20620 | AT4G22513 | 0.30212361 | undirected | NA | NA |
| ## | 4221 | AT1G20620 | AT4G22530 | 0.28637184 | undirected | NA | NA |
| ## | 4222 | AT1G20620 | ATCG01210 | 0.25517745 | undirected | NA | NA |
| ## | 4223 | AT1G20620 | AT3G25520 | 0.24374578 | undirected | NA | NA |
| ## | 4224 | AT2G27720 | AT5G02870 | 0.19902764 | undirected | NA | NA |
| ## | 4225 | AT2G27720 | AT4G15000 | 0.34601903 | undirected | NA | NA |
| ## | 4226 | AT2G27720 | AT5G20290 | 0.08521575 | undirected | NA | NA |
| ## | 4227 | AT2G27720 | AT4G31700 | 0.09997621 | undirected | NA | NA |
| ## | 4228 | AT2G27720 | AT3G04400 | 0.15704206 | undirected | NA | NA |
| ## | 4229 | AT2G27720 | AT3G02230 | 0.19912581 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4230 | AT2G27720 | AT1G54410 | 0.37810602 | undirected | NA | NA |
| ## | 4231 | AT2G27720 | AT3G24830 | 0.33768143 | undirected | NA | NA |
| ## | 4232 | AT2G27720 | AT1G48920 | 0.16031696 | undirected | NA | NA |
| ## | 4233 | AT2G27720 | AT3G08770 | 0.30114901 | undirected | NA | NA |
| ## | 4234 | AT2G27720 | AT3G05590 | 0.27917749 | undirected | NA | NA |
| ## | 4235 | AT2G27720 | AT4G38680 | 0.32661628 | undirected | NA | NA |
| ## | 4236 | AT2G27720 | AT3G04840 | 0.37155462 | undirected | NA | NA |
| ## | 4237 | AT2G27720 | AT2G28790 | 0.24055993 | undirected | NA | NA |
| ## | 4238 | AT2G27720 | AT1G70600 | 0.22742026 | undirected | NA | NA |
| ## | 4239 | AT2G27720 | AT4G27090 | 0.31814795 | undirected | NA | NA |
| ## | 4240 | AT2G27720 | AT1G77510 | 0.20685950 | undirected | NA | NA |
| ## | 4241 | AT2G27720 | AT1G70830 | 0.15881172 | undirected | NA | NA |
| ## | 4242 | AT2G27720 | AT1G15690 | 0.13811542 | undirected | NA | NA |
| ## | 4243 | AT2G27720 | AT3G52590 | 0.13543924 | undirected | NA | NA |
| ## | 4244 | AT2G27720 | AT5G07090 | 0.19986757 | undirected | NA | NA |
| ## | 4245 | AT2G27720 | AT5G17920 | 0.19017695 | undirected | NA | NA |
| ## | 4246 | AT2G27720 | AT5G56030 | 0.22871857 | undirected | NA | NA |
| ## | 4247 | AT2G27720 | AT2G41840 | 0.43840823 | undirected | NA | NA |
| ## | 4248 | AT2G27720 | AT3G60245 | 0.23153097 | undirected | NA | NA |
| ## | 4249 | AT2G27720 | AT2G08665 | 0.23273408 | undirected | NA | NA |
| ## | 4250 | AT2G27720 | AT3G26520 | 0.06642079 | undirected | NA | NA |
| ## | 4251 | AT2G27720 | AT2G42840 | 0.34046801 | undirected | NA | NA |
| ## | 4252 | AT2G27720 | AT1G72370 | 0.20003422 | undirected | NA | NA |
| ## | 4253 | AT2G27720 | AT2G05520 | 0.33601781 | undirected | NA | NA |
| ## | 4254 | AT2G27720 | AT4G22513 | 0.30050706 | undirected | NA | NA |
| ## | 4255 | AT2G27720 | AT4G22530 | 0.35193123 | undirected | NA | NA |
| ## | 4256 | AT2G27720 | ATCG01210 | 0.39059401 | undirected | NA | NA |
| ## | 4257 | AT2G27720 | AT3G25520 | 0.27012773 | undirected | NA | NA |
| ## | 4258 | AT5G02870 | AT4G15000 | 0.29275752 | undirected | NA | NA |
| ## | 4259 | AT5G02870 | AT5G20290 | 0.05856406 | undirected | NA | NA |
| ## | 4260 | AT5G02870 | AT4G31700 | 0.19559474 | undirected | NA | NA |
| ## | 4261 | AT5G02870 | AT3G04400 | 0.03409755 | undirected | NA | NA |
| ## | 4262 | AT5G02870 | AT3G02230 | 0.20511301 | undirected | NA | NA |
| ## | 4263 | AT5G02870 | AT1G54410 | 0.25694124 | undirected | NA | NA |
| ## | 4264 | AT5G02870 | AT3G24830 | 0.30641736 | undirected | NA | NA |
| ## | 4265 | AT5G02870 | AT1G48920 | 0.03917124 | undirected | NA | NA |
| ## | 4266 | AT5G02870 | AT3G08770 | 0.20046934 | undirected | NA | NA |
| ## | 4267 | AT5G02870 | AT3G05590 | 0.36229662 | undirected | NA | NA |
| ## | 4268 | AT5G02870 | AT4G38680 | 0.17414110 | undirected | NA | NA |
| ## | 4269 | AT5G02870 | AT3G04840 | 0.12121759 | undirected | NA | NA |
| ## | 4270 | AT5G02870 | AT2G28790 | 0.06287261 | undirected | NA | NA |
| ## | 4271 | AT5G02870 | AT1G70600 | 0.21802408 | undirected | NA | NA |
| ## | 4272 | AT5G02870 | AT4G27090 | 0.17601386 | undirected | NA | NA |
| ## | 4273 | AT5G02870 | AT1G77510 | 0.16092808 | undirected | NA | NA |
| ## | 4274 | AT5G02870 | AT1G70830 | 0.05041601 | undirected | NA | NA |
| ## | 4275 | AT5G02870 | AT1G15690 | 0.23586839 | undirected | NA | NA |
| ## | 4276 | AT5G02870 | AT3G52590 | 0.07160525 | undirected | NA | NA |
| ## | 4277 | AT5G02870 | AT5G07090 | 0.27062360 | undirected | NA | NA |
| ## | 4278 | AT5G02870 | AT5G17920 | 0.03470003 | undirected | NA | NA |
| ## | 4279 | AT5G02870 | AT5G56030 | 0.21069897 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4280 | AT5G02870 | AT2G41840 | 0.21771505 | undirected | NA | NA |
| ## | 4281 | AT5G02870 | AT3G60245 | 0.17179112 | undirected | NA | NA |
| ## | 4282 | AT5G02870 | AT2G08665 | 0.25226608 | undirected | NA | NA |
| ## | 4283 | AT5G02870 | AT2G42840 | 0.14419672 | undirected | NA | NA |
| ## | 4284 | AT5G02870 | AT1G72370 | 0.07965625 | undirected | NA | NA |
| ## | 4285 | AT5G02870 | AT2G05520 | 0.25281704 | undirected | NA | NA |
| ## | 4286 | AT5G02870 | AT4G22513 | 0.25430723 | undirected | NA | NA |
| ## | 4287 | AT5G02870 | AT4G22530 | 0.21634906 | undirected | NA | NA |
| ## | 4288 | AT5G02870 | ATCG01210 | 0.16787048 | undirected | NA | NA |
| ## | 4289 | AT5G02870 | AT3G25520 | 0.24298439 | undirected | NA | NA |
| ## | 4290 | AT4G15000 | AT5G20290 | 0.20796910 | undirected | NA | NA |
| ## | 4291 | AT4G15000 | AT4G31700 | 0.25177406 | undirected | NA | NA |
| ## | 4292 | AT4G15000 | AT3G04400 | 0.13684231 | undirected | NA | NA |
| ## | 4293 | AT4G15000 | AT3G02230 | 0.29343814 | undirected | NA | NA |
| ## | 4294 | AT4G15000 | AT1G54410 | 0.36039109 | undirected | NA | NA |
| ## | 4295 | AT4G15000 | AT3G24830 | 0.34024040 | undirected | NA | NA |
| ## | 4296 | AT4G15000 | AT1G48920 | 0.13426890 | undirected | NA | NA |
| ## | 4297 | AT4G15000 | AT3G08770 | 0.38532459 | undirected | NA | NA |
| ## | 4298 | AT4G15000 | AT3G05590 | 0.36326110 | undirected | NA | NA |
| ## | 4299 | AT4G15000 | AT4G38680 | 0.37690743 | undirected | NA | NA |
| ## | 4300 | AT4G15000 | AT3G04840 | 0.30233870 | undirected | NA | NA |
| ## | 4301 | AT4G15000 | AT2G28790 | 0.21415795 | undirected | NA | NA |
| ## | 4302 | AT4G15000 | AT1G70600 | 0.33978997 | undirected | NA | NA |
| ## | 4303 | AT4G15000 | AT4G27090 | 0.37407901 | undirected | NA | NA |
| ## | 4304 | AT4G15000 | AT1G77510 | 0.34257561 | undirected | NA | NA |
| ## | 4305 | AT4G15000 | AT1G70830 | 0.14696241 | undirected | NA | NA |
| ## | 4306 | AT4G15000 | AT1G15690 | 0.27222324 | undirected | NA | NA |
| ## | 4307 | AT4G15000 | AT3G52590 | 0.13293676 | undirected | NA | NA |
| ## | 4308 | AT4G15000 | AT5G07090 | 0.28045735 | undirected | NA | NA |
| ## | 4309 | AT4G15000 | AT5G17920 | 0.13273626 | undirected | NA | NA |
| ## | 4310 | AT4G15000 | AT5G56030 | 0.30446032 | undirected | NA | NA |
| ## | 4311 | AT4G15000 | AT2G41840 | 0.31482183 | undirected | NA | NA |
| ## | 4312 | AT4G15000 | AT3G60245 | 0.36571395 | undirected | NA | NA |
| ## | 4313 | AT4G15000 | AT2G08665 | 0.32177312 | undirected | NA | NA |
| ## | 4314 | AT4G15000 | AT3G26520 | 0.02937768 | undirected | NA | NA |
| ## | 4315 | AT4G15000 | AT2G42840 | 0.34820555 | undirected | NA | NA |
| ## | 4316 | AT4G15000 | AT1G72370 | 0.24117033 | undirected | NA | NA |
| ## | 4317 | AT4G15000 | AT2G05520 | 0.33741703 | undirected | NA | NA |
| ## | 4318 | AT4G15000 | AT4G22513 | 0.31612909 | undirected | NA | NA |
| ## | 4319 | AT4G15000 | AT4G22530 | 0.35593686 | undirected | NA | NA |
| ## | 4320 | AT4G15000 | ATCG01210 | 0.33050757 | undirected | NA | NA |
| ## | 4321 | AT4G15000 | AT3G25520 | 0.33603864 | undirected | NA | NA |
| ## | 4322 | AT5G20290 | AT4G31700 | 0.05093162 | undirected | NA | NA |
| ## | 4323 | AT5G20290 | AT3G04400 | 0.08920969 | undirected | NA | NA |
| ## | 4324 | AT5G20290 | AT3G02230 | 0.16482252 | undirected | NA | NA |
| ## | 4325 | AT5G20290 | AT1G54410 | 0.20075118 | undirected | NA | NA |
| ## | 4326 | AT5G20290 | AT3G24830 | 0.15396349 | undirected | NA | NA |
| ## | 4327 | AT5G20290 | AT1G48920 | 0.10116251 | undirected | NA | NA |
| ## | 4328 | AT5G20290 | AT3G08770 | 0.14733405 | undirected | NA | NA |
| ## | 4329 | AT5G20290 | AT3G05590 | 0.16039450 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4330 | AT5G20290 | AT4G38680 | 0.18478204 | undirected | NA | NA |
| ## | 4331 | AT5G20290 | AT3G04840 | 0.08316160 | undirected | NA | NA |
| ## | 4332 | AT5G20290 | AT2G28790 | 0.11650816 | undirected | NA | NA |
| ## | 4333 | AT5G20290 | AT1G70600 | 0.11184489 | undirected | NA | NA |
| ## | 4334 | AT5G20290 | AT4G27090 | 0.21179507 | undirected | NA | NA |
| ## | 4335 | AT5G20290 | AT1G77510 | 0.14375239 | undirected | NA | NA |
| ## | 4336 | AT5G20290 | AT1G70830 | 0.04222332 | undirected | NA | NA |
| ## | 4337 | AT5G20290 | AT1G15690 | 0.03809742 | undirected | NA | NA |
| ## | 4338 | AT5G20290 | AT5G07090 | 0.08436219 | undirected | NA | NA |
| ## | 4339 | AT5G20290 | AT5G17920 | 0.04371842 | undirected | NA | NA |
| ## | 4340 | AT5G20290 | AT5G56030 | 0.23627078 | undirected | NA | NA |
| ## | 4341 | AT5G20290 | AT2G41840 | 0.13305450 | undirected | NA | NA |
| ## | 4342 | AT5G20290 | AT3G60245 | 0.14417717 | undirected | NA | NA |
| ## | 4343 | AT5G20290 | AT2G08665 | 0.02630275 | undirected | NA | NA |
| ## | 4344 | AT5G20290 | AT3G26520 | 0.02515659 | undirected | NA | NA |
| ## | 4345 | AT5G20290 | AT2G42840 | 0.15542091 | undirected | NA | NA |
| ## | 4346 | AT5G20290 | AT1G72370 | 0.16419295 | undirected | NA | NA |
| ## | 4347 | AT5G20290 | AT2G05520 | 0.21935316 | undirected | NA | NA |
| ## | 4348 | AT5G20290 | AT4G22513 | 0.19180499 | undirected | NA | NA |
| ## | 4349 | AT5G20290 | AT4G22530 | 0.15286974 | undirected | NA | NA |
| ## | 4350 | AT5G20290 | ATCG01210 | 0.12417400 | undirected | NA | NA |
| ## | 4351 | AT5G20290 | AT3G25520 | 0.04368550 | undirected | NA | NA |
| ## | 4352 | AT4G31700 | AT3G04400 | 0.03060499 | undirected | NA | NA |
| ## | 4353 | AT4G31700 | AT3G02230 | 0.15393576 | undirected | NA | NA |
| ## | 4354 | AT4G31700 | AT1G54410 | 0.19887077 | undirected | NA | NA |
| ## | 4355 | AT4G31700 | AT3G24830 | 0.22726421 | undirected | NA | NA |
| ## | 4356 | AT4G31700 | AT1G48920 | 0.03310536 | undirected | NA | NA |
| ## | 4357 | AT4G31700 | AT3G08770 | 0.08888056 | undirected | NA | NA |
| ## | 4358 | AT4G31700 | AT3G05590 | 0.34486061 | undirected | NA | NA |
| ## | 4359 | AT4G31700 | AT4G38680 | 0.10872428 | undirected | NA | NA |
| ## | 4360 | AT4G31700 | AT3G04840 | 0.03978193 | undirected | NA | NA |
| ## | 4361 | AT4G31700 | AT1G70600 | 0.17837203 | undirected | NA | NA |
| ## | 4362 | AT4G31700 | AT4G27090 | 0.12693906 | undirected | NA | NA |
| ## | 4363 | AT4G31700 | AT1G77510 | 0.14760998 | undirected | NA | NA |
| ## | 4364 | AT4G31700 | AT1G15690 | 0.10631451 | undirected | NA | NA |
| ## | 4365 | AT4G31700 | AT5G07090 | 0.22331585 | undirected | NA | NA |
| ## | 4366 | AT4G31700 | AT5G56030 | 0.18881416 | undirected | NA | NA |
| ## | 4367 | AT4G31700 | AT2G41840 | 0.11077607 | undirected | NA | NA |
| ## | 4368 | AT4G31700 | AT3G60245 | 0.14295800 | undirected | NA | NA |
| ## | 4369 | AT4G31700 | AT2G08665 | 0.17395985 | undirected | NA | NA |
| ## | 4370 | AT4G31700 | AT2G42840 | 0.05567260 | undirected | NA | NA |
| ## | 4371 | AT4G31700 | AT1G72370 | 0.05017812 | undirected | NA | NA |
| ## | 4372 | AT4G31700 | AT2G05520 | 0.18809308 | undirected | NA | NA |
| ## | 4373 | AT4G31700 | AT4G22513 | 0.19116173 | undirected | NA | NA |
| ## | 4374 | AT4G31700 | AT4G22530 | 0.13166877 | undirected | NA | NA |
| ## | 4375 | AT4G31700 | ATCG01210 | 0.07865836 | undirected | NA | NA |
| ## | 4376 | AT4G31700 | AT3G25520 | 0.13554321 | undirected | NA | NA |
| ## | 4377 | AT3G04400 | AT3G02230 | 0.06079796 | undirected | NA | NA |
| ## | 4378 | AT3G04400 | AT1G54410 | 0.16720392 | undirected | NA | NA |
| ## | 4379 | AT3G04400 | AT3G24830 | 0.09627045 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4380 | AT3G04400 | AT1G48920 | 0.14181063 | undirected | NA | NA |
| ## | 4381 | AT3G04400 | AT3G08770 | 0.16301379 | undirected | NA | NA |
| ## | 4382 | AT3G04400 | AT3G05590 | 0.06633356 | undirected | NA | NA |
| ## | 4383 | AT3G04400 | AT4G38680 | 0.20953585 | undirected | NA | NA |
| ## | 4384 | AT3G04400 | AT3G04840 | 0.21858426 | undirected | NA | NA |
| ## | 4385 | AT3G04400 | AT2G28790 | 0.15221297 | undirected | NA | NA |
| ## | 4386 | AT3G04400 | AT1G70600 | 0.07438910 | undirected | NA | NA |
| ## | 4387 | AT3G04400 | AT4G27090 | 0.20600227 | undirected | NA | NA |
| ## | 4388 | AT3G04400 | AT1G77510 | 0.12361316 | undirected | NA | NA |
| ## | 4389 | AT3G04400 | AT1G70830 | 0.02929867 | undirected | NA | NA |
| ## | 4390 | AT3G04400 | AT5G07090 | 0.03190490 | undirected | NA | NA |
| ## | 4391 | AT3G04400 | AT5G17920 | 0.07260347 | undirected | NA | NA |
| ## | 4392 | AT3G04400 | AT5G56030 | 0.09685099 | undirected | NA | NA |
| ## | 4393 | AT3G04400 | AT2G41840 | 0.17284197 | undirected | NA | NA |
| ## | 4394 | AT3G04400 | AT3G60245 | 0.14541224 | undirected | NA | NA |
| ## | 4395 | AT3G04400 | AT2G08665 | 0.04228103 | undirected | NA | NA |
| ## | 4396 | AT3G04400 | AT3G26520 | 0.03462828 | undirected | NA | NA |
| ## | 4397 | AT3G04400 | AT2G42840 | 0.25255219 | undirected | NA | NA |
| ## | 4398 | AT3G04400 | AT1G72370 | 0.18486985 | undirected | NA | NA |
| ## | 4399 | AT3G04400 | AT2G05520 | 0.13672148 | undirected | NA | NA |
| ## | 4400 | AT3G04400 | AT4G22513 | 0.09889013 | undirected | NA | NA |
| ## | 4401 | AT3G04400 | AT4G22530 | 0.15281532 | undirected | NA | NA |
| ## | 4402 | AT3G04400 | ATCG01210 | 0.19426404 | undirected | NA | NA |
| ## | 4403 | AT3G04400 | AT3G25520 | 0.06097464 | undirected | NA | NA |
| ## | 4404 | AT3G02230 | AT1G54410 | 0.25994491 | undirected | NA | NA |
| ## | 4405 | AT3G02230 | AT3G24830 | 0.32829053 | undirected | NA | NA |
| ## | 4406 | AT3G02230 | AT1G48920 | 0.05916331 | undirected | NA | NA |
| ## | 4407 | AT3G02230 | AT3G08770 | 0.24726371 | undirected | NA | NA |
| ## | 4408 | AT3G02230 | AT3G05590 | 0.34371863 | undirected | NA | NA |
| ## | 4409 | AT3G02230 | AT4G38680 | 0.24035709 | undirected | NA | NA |
| ## | 4410 | AT3G02230 | AT3G04840 | 0.15818540 | undirected | NA | NA |
| ## | 4411 | AT3G02230 | AT2G28790 | 0.12598753 | undirected | NA | NA |
| ## | 4412 | AT3G02230 | AT1G70600 | 0.23917948 | undirected | NA | NA |
| ## | 4413 | AT3G02230 | AT4G27090 | 0.24907261 | undirected | NA | NA |
| ## | 4414 | AT3G02230 | AT1G77510 | 0.21938619 | undirected | NA | NA |
| ## | 4415 | AT3G02230 | AT1G70830 | 0.13091446 | undirected | NA | NA |
| ## | 4416 | AT3G02230 | AT1G15690 | 0.21185765 | undirected | NA | NA |
| ## | 4417 | AT3G02230 | AT3G52590 | 0.14345812 | undirected | NA | NA |
| ## | 4418 | AT3G02230 | AT5G07090 | 0.21593537 | undirected | NA | NA |
| ## | 4419 | AT3G02230 | AT5G17920 | 0.08341473 | undirected | NA | NA |
| ## | 4420 | AT3G02230 | AT5G56030 | 0.28010994 | undirected | NA | NA |
| ## | 4421 | AT3G02230 | AT2G41840 | 0.22871904 | undirected | NA | NA |
| ## | 4422 | AT3G02230 | AT3G60245 | 0.21985764 | undirected | NA | NA |
| ## | 4423 | AT3G02230 | AT2G08665 | 0.17315206 | undirected | NA | NA |
| ## | 4424 | AT3G02230 | AT2G42840 | 0.20629304 | undirected | NA | NA |
| ## | 4425 | AT3G02230 | AT1G72370 | 0.13256099 | undirected | NA | NA |
| ## | 4426 | AT3G02230 | AT2G05520 | 0.28810006 | undirected | NA | NA |
| ## | 4427 | AT3G02230 | AT4G22513 | 0.30373109 | undirected | NA | NA |
| ## | 4428 | AT3G02230 | AT4G22530 | 0.24348672 | undirected | NA | NA |
| ## | 4429 | AT3G02230 | ATCG01210 | 0.20925223 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4430 | AT3G02230 | AT3G25520 | 0.18694950 | undirected | NA | NA |
| ## | 4431 | AT1G54410 | AT3G24830 | 0.34714422 | undirected | NA | NA |
| ## | 4432 | AT1G54410 | AT1G48920 | 0.15876688 | undirected | NA | NA |
| ## | 4433 | AT1G54410 | AT3G08770 | 0.39944282 | undirected | NA | NA |
| ## | 4434 | AT1G54410 | AT3G05590 | 0.34088329 | undirected | NA | NA |
| ## | 4435 | AT1G54410 | AT4G38680 | 0.39805667 | undirected | NA | NA |
| ## | 4436 | AT1G54410 | AT3G04840 | 0.36779325 | undirected | NA | NA |
| ## | 4437 | AT1G54410 | AT2G28790 | 0.26563830 | undirected | NA | NA |
| ## | 4438 | AT1G54410 | AT1G70600 | 0.31934928 | undirected | NA | NA |
| ## | 4439 | AT1G54410 | AT4G27090 | 0.38311923 | undirected | NA | NA |
| ## | 4440 | AT1G54410 | AT1G77510 | 0.33005033 | undirected | NA | NA |
| ## | 4441 | AT1G54410 | AT1G70830 | 0.18172652 | undirected | NA | NA |
| ## | 4442 | AT1G54410 | AT1G15690 | 0.23056554 | undirected | NA | NA |
| ## | 4443 | AT1G54410 | AT3G52590 | 0.14928947 | undirected | NA | NA |
| ## | 4444 | AT1G54410 | AT5G07090 | 0.24144540 | undirected | NA | NA |
| ## | 4445 | AT1G54410 | AT5G17920 | 0.17913488 | undirected | NA | NA |
| ## | 4446 | AT1G54410 | AT5G56030 | 0.28740018 | undirected | NA | NA |
| ## | 4447 | AT1G54410 | AT2G41840 | 0.33534425 | undirected | NA | NA |
| ## | 4448 | AT1G54410 | AT3G60245 | 0.36170295 | undirected | NA | NA |
| ## | 4449 | AT1G54410 | AT2G08665 | 0.29617112 | undirected | NA | NA |
| ## | 4450 | AT1G54410 | AT3G26520 | 0.04952928 | undirected | NA | NA |
| ## | 4451 | AT1G54410 | AT2G42840 | 0.39440796 | undirected | NA | NA |
| ## | 4452 | AT1G54410 | AT1G72370 | 0.26604670 | undirected | NA | NA |
| ## | 4453 | AT1G54410 | AT2G05520 | 0.34504120 | undirected | NA | NA |
| ## | 4454 | AT1G54410 | AT4G22513 | 0.32613491 | undirected | NA | NA |
| ## | 4455 | AT1G54410 | AT4G22530 | 0.36570563 | undirected | NA | NA |
| ## | 4456 | AT1G54410 | ATCG01210 | 0.36883605 | undirected | NA | NA |
| ## | 4457 | AT1G54410 | AT3G25520 | 0.33990521 | undirected | NA | NA |
| ## | 4458 | AT3G24830 | AT1G48920 | 0.09377703 | undirected | NA | NA |
| ## | 4459 | AT3G24830 | AT3G08770 | 0.33816862 | undirected | NA | NA |
| ## | 4460 | AT3G24830 | AT3G05590 | 0.34910474 | undirected | NA | NA |
| ## | 4461 | AT3G24830 | AT4G38680 | 0.34780254 | undirected | NA | NA |
| ## | 4462 | AT3G24830 | AT3G04840 | 0.27674657 | undirected | NA | NA |
| ## | 4463 | AT3G24830 | AT2G28790 | 0.16719896 | undirected | NA | NA |
| ## | 4464 | AT3G24830 | AT1G70600 | 0.32543464 | undirected | NA | NA |
| ## | 4465 | AT3G24830 | AT4G27090 | 0.35047769 | undirected | NA | NA |
| ## | 4466 | AT3G24830 | AT1G77510 | 0.32058265 | undirected | NA | NA |
| ## | 4467 | AT3G24830 | AT1G70830 | 0.16969933 | undirected | NA | NA |
| ## | 4468 | AT3G24830 | AT1G15690 | 0.29322280 | undirected | NA | NA |
| ## | 4469 | AT3G24830 | AT3G52590 | 0.19213071 | undirected | NA | NA |
| ## | 4470 | AT3G24830 | AT5G07090 | 0.30028833 | undirected | NA | NA |
| ## | 4471 | AT3G24830 | AT5G17920 | 0.14362006 | undirected | NA | NA |
| ## | 4472 | AT3G24830 | AT5G56030 | 0.31720037 | undirected | NA | NA |
| ## | 4473 | AT3G24830 | AT2G41840 | 0.34915200 | undirected | NA | NA |
| ## | 4474 | AT3G24830 | AT3G60245 | 0.31382533 | undirected | NA | NA |
| ## | 4475 | AT3G24830 | AT2G08665 | 0.30596736 | undirected | NA | NA |
| ## | 4476 | AT3G24830 | AT3G26520 | 0.02233984 | undirected | NA | NA |
| ## | 4477 | AT3G24830 | AT2G42840 | 0.31636314 | undirected | NA | NA |
| ## | 4478 | AT3G24830 | AT1G72370 | 0.15725335 | undirected | NA | NA |
| ## | 4479 | AT3G24830 | AT2G05520 | 0.34623509 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4480 | AT3G24830 | AT4G22513 | 0.34080467 | undirected | NA | NA |
| ## | 4481 | AT3G24830 | AT4G22530 | 0.34973301 | undirected | NA | NA |
| ## | 4482 | AT3G24830 | ATCG01210 | 0.33425259 | undirected | NA | NA |
| ## | 4483 | AT3G24830 | AT3G25520 | 0.29398724 | undirected | NA | NA |
| ## | 4484 | AT1G48920 | AT3G08770 | 0.19102083 | undirected | NA | NA |
| ## | 4485 | AT1G48920 | AT3G05590 | 0.06270658 | undirected | NA | NA |
| ## | 4486 | AT1G48920 | AT4G38680 | 0.21438953 | undirected | NA | NA |
| ## | 4487 | AT1G48920 | AT3G04840 | 0.22388348 | undirected | NA | NA |
| ## | 4488 | AT1G48920 | AT2G28790 | 0.17420050 | undirected | NA | NA |
| ## | 4489 | AT1G48920 | AT1G70600 | 0.06757592 | undirected | NA | NA |
| ## | 4490 | AT1G48920 | AT4G27090 | 0.21789682 | undirected | NA | NA |
| ## | 4491 | AT1G48920 | AT1G77510 | 0.10100723 | undirected | NA | NA |
| ## | 4492 | AT1G48920 | AT1G70830 | 0.02793990 | undirected | NA | NA |
| ## | 4493 | AT1G48920 | AT5G07090 | 0.03103202 | undirected | NA | NA |
| ## | 4494 | AT1G48920 | AT5G17920 | 0.07710678 | undirected | NA | NA |
| ## | 4495 | AT1G48920 | AT5G56030 | 0.08373497 | undirected | NA | NA |
| ## | 4496 | AT1G48920 | AT2G41840 | 0.16969541 | undirected | NA | NA |
| ## | 4497 | AT1G48920 | AT3G60245 | 0.12376906 | undirected | NA | NA |
| ## | 4498 | AT1G48920 | AT2G08665 | 0.05302101 | undirected | NA | NA |
| ## | 4499 | AT1G48920 | AT3G26520 | 0.03875480 | undirected | NA | NA |
| ## | 4500 | AT1G48920 | AT2G42840 | 0.28011157 | undirected | NA | NA |
| ## | 4501 | AT1G48920 | AT1G72370 | 0.22691659 | undirected | NA | NA |
| ## | 4502 | AT1G48920 | AT2G05520 | 0.13397915 | undirected | NA | NA |
| ## | 4503 | AT1G48920 | AT4G22513 | 0.09387579 | undirected | NA | NA |
| ## | 4504 | AT1G48920 | AT4G22530 | 0.16051228 | undirected | NA | NA |
| ## | 4505 | AT1G48920 | ATCG01210 | 0.19825883 | undirected | NA | NA |
| ## | 4506 | AT1G48920 | AT3G25520 | 0.06242798 | undirected | NA | NA |
| ## | 4507 | AT3G08770 | AT3G05590 | 0.30415652 | undirected | NA | NA |
| ## | 4508 | AT3G08770 | AT4G38680 | 0.34784571 | undirected | NA | NA |
| ## | 4509 | AT3G08770 | AT3G04840 | 0.25523964 | undirected | NA | NA |
| ## | 4510 | AT3G08770 | AT2G28790 | 0.25283175 | undirected | NA | NA |
| ## | 4511 | AT3G08770 | AT1G70600 | 0.24742783 | undirected | NA | NA |
| ## | 4512 | AT3G08770 | AT4G27090 | 0.35932475 | undirected | NA | NA |
| ## | 4513 | AT3G08770 | AT1G77510 | 0.21005333 | undirected | NA | NA |
| ## | 4514 | AT3G08770 | AT1G70830 | 0.12309834 | undirected | NA | NA |
| ## | 4515 | AT3G08770 | AT1G15690 | 0.12348504 | undirected | NA | NA |
| ## | 4516 | AT3G08770 | AT3G52590 | 0.09909197 | undirected | NA | NA |
| ## | 4517 | AT3G08770 | AT5G07090 | 0.21274643 | undirected | NA | NA |
| ## | 4518 | AT3G08770 | AT5G17920 | 0.13153328 | undirected | NA | NA |
| ## | 4519 | AT3G08770 | AT5G56030 | 0.27928614 | undirected | NA | NA |
| ## | 4520 | AT3G08770 | AT2G41840 | 0.38460894 | undirected | NA | NA |
| ## | 4521 | AT3G08770 | AT3G60245 | 0.21219634 | undirected | NA | NA |
| ## | 4522 | AT3G08770 | AT2G08665 | 0.16617584 | undirected | NA | NA |
| ## | 4523 | AT3G08770 | AT3G26520 | 0.06838567 | undirected | NA | NA |
| ## | 4524 | AT3G08770 | AT2G42840 | 0.27898821 | undirected | NA | NA |
| ## | 4525 | AT3G08770 | AT1G72370 | 0.27228502 | undirected | NA | NA |
| ## | 4526 | AT3G08770 | AT2G05520 | 0.37610741 | undirected | NA | NA |
| ## | 4527 | AT3G08770 | AT4G22513 | 0.32576724 | undirected | NA | NA |
| ## | 4528 | AT3G08770 | AT4G22530 | 0.36803471 | undirected | NA | NA |
| ## | 4529 | AT3G08770 | ATCG01210 | 0.35484871 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4530 | AT3G08770 | AT3G25520 | 0.19547960 | undirected | NA | NA |
| ## | 4531 | AT3G05590 | AT4G38680 | 0.29817550 | undirected | NA | NA |
| ## | 4532 | AT3G05590 | AT3G04840 | 0.18355362 | undirected | NA | NA |
| ## | 4533 | AT3G05590 | AT2G28790 | 0.10270210 | undirected | NA | NA |
| ## | 4534 | AT3G05590 | AT1G70600 | 0.36124048 | undirected | NA | NA |
| ## | 4535 | AT3G05590 | AT4G27090 | 0.31291874 | undirected | NA | NA |
| ## | 4536 | AT3G05590 | AT1G77510 | 0.33776025 | undirected | NA | NA |
| ## | 4537 | AT3G05590 | AT1G70830 | 0.09248076 | undirected | NA | NA |
| ## | 4538 | AT3G05590 | AT1G15690 | 0.34457539 | undirected | NA | NA |
| ## | 4539 | AT3G05590 | AT3G52590 | 0.10764291 | undirected | NA | NA |
| ## | 4540 | AT3G05590 | AT5G07090 | 0.36334579 | undirected | NA | NA |
| ## | 4541 | AT3G05590 | AT5G17920 | 0.06720614 | undirected | NA | NA |
| ## | 4542 | AT3G05590 | AT5G56030 | 0.34182698 | undirected | NA | NA |
| ## | 4543 | AT3G05590 | AT2G41840 | 0.27551778 | undirected | NA | NA |
| ## | 4544 | AT3G05590 | AT3G60245 | 0.33233841 | undirected | NA | NA |
| ## | 4545 | AT3G05590 | AT2G08665 | 0.35058410 | undirected | NA | NA |
| ## | 4546 | AT3G05590 | AT2G42840 | 0.23222152 | undirected | NA | NA |
| ## | 4547 | AT3G05590 | AT1G72370 | 0.13174054 | undirected | NA | NA |
| ## | 4548 | AT3G05590 | AT2G05520 | 0.33976583 | undirected | NA | NA |
| ## | 4549 | AT3G05590 | AT4G22513 | 0.34437373 | undirected | NA | NA |
| ## | 4550 | AT3G05590 | AT4G22530 | 0.31345785 | undirected | NA | NA |
| ## | 4551 | AT3G05590 | ATCG01210 | 0.25174153 | undirected | NA | NA |
| ## | 4552 | AT3G05590 | AT3G25520 | 0.31559304 | undirected | NA | NA |
| ## | 4553 | AT4G38680 | AT3G04840 | 0.37803187 | undirected | NA | NA |
| ## | 4554 | AT4G38680 | AT2G28790 | 0.32609784 | undirected | NA | NA |
| ## | 4555 | AT4G38680 | AT1G70600 | 0.23433157 | undirected | NA | NA |
| ## | 4556 | AT4G38680 | AT4G27090 | 0.35442358 | undirected | NA | NA |
| ## | 4557 | AT4G38680 | AT1G77510 | 0.25181339 | undirected | NA | NA |
| ## | 4558 | AT4G38680 | AT1G70830 | 0.19656744 | undirected | NA | NA |
| ## | 4559 | AT4G38680 | AT1G15690 | 0.13950690 | undirected | NA | NA |
| ## | 4560 | AT4G38680 | AT3G52590 | 0.14293726 | undirected | NA | NA |
| ## | 4561 | AT4G38680 | AT5G07090 | 0.19226398 | undirected | NA | NA |
| ## | 4562 | AT4G38680 | AT5G17920 | 0.21995623 | undirected | NA | NA |
| ## | 4563 | AT4G38680 | AT5G56030 | 0.28906763 | undirected | NA | NA |
| ## | 4564 | AT4G38680 | AT2G41840 | 0.40932478 | undirected | NA | NA |
| ## | 4565 | AT4G38680 | AT3G60245 | 0.28288336 | undirected | NA | NA |
| ## | 4566 | AT4G38680 | AT2G08665 | 0.20687153 | undirected | NA | NA |
| ## | 4567 | AT4G38680 | AT3G26520 | 0.07871756 | undirected | NA | NA |
| ## | 4568 | AT4G38680 | AT2G42840 | 0.38675831 | undirected | NA | NA |
| ## | 4569 | AT4G38680 | AT1G72370 | 0.30543046 | undirected | NA | NA |
| ## | 4570 | AT4G38680 | AT2G05520 | 0.37454326 | undirected | NA | NA |
| ## | 4571 | AT4G38680 | AT4G22513 | 0.33912172 | undirected | NA | NA |
| ## | 4572 | AT4G38680 | AT4G22530 | 0.34966100 | undirected | NA | NA |
| ## | 4573 | AT4G38680 | ATCG01210 | 0.36356835 | undirected | NA | NA |
| ## | 4574 | AT4G38680 | AT3G25520 | 0.24836925 | undirected | NA | NA |
| ## | 4575 | AT3G04840 | AT2G28790 | 0.28129248 | undirected | NA | NA |
| ## | 4576 | AT3G04840 | AT1G70600 | 0.18227666 | undirected | NA | NA |
| ## | 4577 | AT3G04840 | AT4G27090 | 0.35543014 | undirected | NA | NA |
| ## | 4578 | AT3G04840 | AT1G77510 | 0.21387192 | undirected | NA | NA |
| ## | 4579 | AT3G04840 | AT1G70830 | 0.15326670 | undirected | NA | NA |

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|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4580 | AT3G04840 | AT1G15690 | 0.05349131 | undirected | NA | NA |
| ## | 4581 | AT3G04840 | AT3G52590 | 0.08710997 | undirected | NA | NA |
| ## | 4582 | AT3G04840 | AT5G07090 | 0.11839698 | undirected | NA | NA |
| ## | 4583 | AT3G04840 | AT5G17920 | 0.22586433 | undirected | NA | NA |
| ## | 4584 | AT3G04840 | AT5G56030 | 0.20579467 | undirected | NA | NA |
| ## | 4585 | AT3G04840 | AT2G41840 | 0.46949012 | undirected | NA | NA |
| ## | 4586 | AT3G04840 | AT3G60245 | 0.21120033 | undirected | NA | NA |
| ## | 4587 | AT3G04840 | AT2G08665 | 0.09978388 | undirected | NA | NA |
| ## | 4588 | AT3G04840 | AT3G26520 | 0.10998779 | undirected | NA | NA |
| ## | 4589 | AT3G04840 | AT2G42840 | 0.35864847 | undirected | NA | NA |
| ## | 4590 | AT3G04840 | AT1G72370 | 0.21598546 | undirected | NA | NA |
| ## | 4591 | AT3G04840 | AT2G05520 | 0.31503138 | undirected | NA | NA |
| ## | 4592 | AT3G04840 | AT4G22513 | 0.26359104 | undirected | NA | NA |
| ## | 4593 | AT3G04840 | AT4G22530 | 0.35004017 | undirected | NA | NA |
| ## | 4594 | AT3G04840 | ATCG01210 | 0.45054165 | undirected | NA | NA |
| ## | 4595 | AT3G04840 | AT3G25520 | 0.13380623 | undirected | NA | NA |
| ## | 4596 | AT2G28790 | AT1G70600 | 0.11880805 | undirected | NA | NA |
| ## | 4597 | AT2G28790 | AT4G27090 | 0.31861548 | undirected | NA | NA |
| ## | 4598 | AT2G28790 | AT1G77510 | 0.14623576 | undirected | NA | NA |
| ## | 4599 | AT2G28790 | AT1G70830 | 0.10227917 | undirected | NA | NA |
| ## | 4600 | AT2G28790 | AT1G15690 | 0.03273270 | undirected | NA | NA |
| ## | 4601 | AT2G28790 | AT3G52590 | 0.04471328 | undirected | NA | NA |
| ## | 4602 | AT2G28790 | AT5G07090 | 0.06324560 | undirected | NA | NA |
| ## | 4603 | AT2G28790 | AT5G17920 | 0.13645551 | undirected | NA | NA |
| ## | 4604 | AT2G28790 | AT5G56030 | 0.16472718 | undirected | NA | NA |
| ## | 4605 | AT2G28790 | AT2G41840 | 0.31424270 | undirected | NA | NA |
| ## | 4606 | AT2G28790 | AT3G60245 | 0.15685572 | undirected | NA | NA |
| ## | 4607 | AT2G28790 | AT2G08665 | 0.03778910 | undirected | NA | NA |
| ## | 4608 | AT2G28790 | AT3G26520 | 0.12120151 | undirected | NA | NA |
| ## | 4609 | AT2G28790 | AT2G42840 | 0.36200126 | undirected | NA | NA |
| ## | 4610 | AT2G28790 | AT1G72370 | 0.18939072 | undirected | NA | NA |
| ## | 4611 | AT2G28790 | AT2G05520 | 0.24121527 | undirected | NA | NA |
| ## | 4612 | AT2G28790 | AT4G22513 | 0.18598463 | undirected | NA | NA |
| ## | 4613 | AT2G28790 | AT4G22530 | 0.27041408 | undirected | NA | NA |
| ## | 4614 | AT2G28790 | ATCG01210 | 0.34142467 | undirected | NA | NA |
| ## | 4615 | AT2G28790 | AT3G25520 | 0.07700513 | undirected | NA | NA |
| ## | 4616 | AT1G70600 | AT4G27090 | 0.23581995 | undirected | NA | NA |
| ## | 4617 | AT1G70600 | AT1G77510 | 0.21315073 | undirected | NA | NA |
| ## | 4618 | AT1G70600 | AT1G70830 | 0.08682713 | undirected | NA | NA |
| ## | 4619 | AT1G70600 | AT1G15690 | 0.19033681 | undirected | NA | NA |
| ## | 4620 | AT1G70600 | AT3G52590 | 0.08443907 | undirected | NA | NA |
| ## | 4621 | AT1G70600 | AT5G07090 | 0.25647713 | undirected | NA | NA |
| ## | 4622 | AT1G70600 | AT5G17920 | 0.07023662 | undirected | NA | NA |
| ## | 4623 | AT1G70600 | AT5G56030 | 0.26979975 | undirected | NA | NA |
| ## | 4624 | AT1G70600 | AT2G41840 | 0.26489550 | undirected | NA | NA |
| ## | 4625 | AT1G70600 | AT3G60245 | 0.23722722 | undirected | NA | NA |
| ## | 4626 | AT1G70600 | AT2G08665 | 0.22170913 | undirected | NA | NA |
| ## | 4627 | AT1G70600 | AT2G42840 | 0.20788910 | undirected | NA | NA |
| ## | 4628 | AT1G70600 | AT1G72370 | 0.13833333 | undirected | NA | NA |
| ## | 4629 | AT1G70600 | AT2G05520 | 0.31100502 | undirected | NA | NA |

| | | | | | | | |
|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4630 | AT1G70600 | AT4G22513 | 0.29777461 | undirected | NA | NA |
| ## | 4631 | AT1G70600 | AT4G22530 | 0.25920446 | undirected | NA | NA |
| ## | 4632 | AT1G70600 | ATCG01210 | 0.21433686 | undirected | NA | NA |
| ## | 4633 | AT1G70600 | AT3G25520 | 0.25119881 | undirected | NA | NA |
| ## | 4634 | AT4G27090 | AT1G77510 | 0.26383112 | undirected | NA | NA |
| ## | 4635 | AT4G27090 | AT1G70830 | 0.18929560 | undirected | NA | NA |
| ## | 4636 | AT4G27090 | AT1G15690 | 0.15913872 | undirected | NA | NA |
| ## | 4637 | AT4G27090 | AT3G52590 | 0.14147332 | undirected | NA | NA |
| ## | 4638 | AT4G27090 | AT5G07090 | 0.19912750 | undirected | NA | NA |
| ## | 4639 | AT4G27090 | AT5G17920 | 0.20296788 | undirected | NA | NA |
| ## | 4640 | AT4G27090 | AT5G56030 | 0.29625582 | undirected | NA | NA |
| ## | 4641 | AT4G27090 | AT2G41840 | 0.37668806 | undirected | NA | NA |
| ## | 4642 | AT4G27090 | AT3G60245 | 0.29451911 | undirected | NA | NA |
| ## | 4643 | AT4G27090 | AT2G08665 | 0.21933951 | undirected | NA | NA |
| ## | 4644 | AT4G27090 | AT3G26520 | 0.07317643 | undirected | NA | NA |
| ## | 4645 | AT4G27090 | AT2G42840 | 0.38340790 | undirected | NA | NA |
| ## | 4646 | AT4G27090 | AT1G72370 | 0.31831161 | undirected | NA | NA |
| ## | 4647 | AT4G27090 | AT2G05520 | 0.37054266 | undirected | NA | NA |
| ## | 4648 | AT4G27090 | AT4G22513 | 0.33906746 | undirected | NA | NA |
| ## | 4649 | AT4G27090 | AT4G22530 | 0.33206419 | undirected | NA | NA |
| ## | 4650 | AT4G27090 | ATCG01210 | 0.32761662 | undirected | NA | NA |
| ## | 4651 | AT4G27090 | AT3G25520 | 0.25443627 | undirected | NA | NA |
| ## | 4652 | AT1G77510 | AT1G70830 | 0.09232237 | undirected | NA | NA |
| ## | 4653 | AT1G77510 | AT1G15690 | 0.11414855 | undirected | NA | NA |
| ## | 4654 | AT1G77510 | AT3G52590 | 0.05726284 | undirected | NA | NA |
| ## | 4655 | AT1G77510 | AT5G07090 | 0.19490159 | undirected | NA | NA |
| ## | 4656 | AT1G77510 | AT5G17920 | 0.10677454 | undirected | NA | NA |
| ## | 4657 | AT1G77510 | AT5G56030 | 0.28935976 | undirected | NA | NA |
| ## | 4658 | AT1G77510 | AT2G41840 | 0.28185451 | undirected | NA | NA |
| ## | 4659 | AT1G77510 | AT3G60245 | 0.25570535 | undirected | NA | NA |
| ## | 4660 | AT1G77510 | AT2G08665 | 0.18168059 | undirected | NA | NA |
| ## | 4661 | AT1G77510 | AT2G42840 | 0.22051111 | undirected | NA | NA |
| ## | 4662 | AT1G77510 | AT1G72370 | 0.15757475 | undirected | NA | NA |
| ## | 4663 | AT1G77510 | AT2G05520 | 0.31413669 | undirected | NA | NA |
| ## | 4664 | AT1G77510 | AT4G22513 | 0.30738729 | undirected | NA | NA |
| ## | 4665 | AT1G77510 | AT4G22530 | 0.24691071 | undirected | NA | NA |
| ## | 4666 | AT1G77510 | ATCG01210 | 0.22897188 | undirected | NA | NA |
| ## | 4667 | AT1G77510 | AT3G25520 | 0.19290326 | undirected | NA | NA |
| ## | 4668 | AT1G70830 | AT1G15690 | 0.02818946 | undirected | NA | NA |
| ## | 4669 | AT1G70830 | AT3G52590 | 0.11057032 | undirected | NA | NA |
| ## | 4670 | AT1G70830 | AT5G07090 | 0.06042794 | undirected | NA | NA |
| ## | 4671 | AT1G70830 | AT5G17920 | 0.11842953 | undirected | NA | NA |
| ## | 4672 | AT1G70830 | AT5G56030 | 0.14589066 | undirected | NA | NA |
| ## | 4673 | AT1G70830 | AT2G41840 | 0.28371256 | undirected | NA | NA |
| ## | 4674 | AT1G70830 | AT3G60245 | 0.08324705 | undirected | NA | NA |
| ## | 4675 | AT1G70830 | AT3G26520 | 0.08722515 | undirected | NA | NA |
| ## | 4676 | AT1G70830 | AT2G42840 | 0.19557096 | undirected | NA | NA |
| ## | 4677 | AT1G70830 | AT1G72370 | 0.03970089 | undirected | NA | NA |
| ## | 4678 | AT1G70830 | AT2G05520 | 0.19199252 | undirected | NA | NA |
| ## | 4679 | AT1G70830 | AT4G22513 | 0.17994851 | undirected | NA | NA |

| | | | | | | | |
|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4680 | AT1G70830 | AT4G22530 | 0.18404206 | undirected | NA | NA |
| ## | 4681 | AT1G70830 | ATCG01210 | 0.25223885 | undirected | NA | NA |
| ## | 4682 | AT1G70830 | AT3G25520 | 0.04460345 | undirected | NA | NA |
| ## | 4683 | AT1G15690 | AT3G52590 | 0.04619937 | undirected | NA | NA |
| ## | 4684 | AT1G15690 | AT5G07090 | 0.25669152 | undirected | NA | NA |
| ## | 4685 | AT1G15690 | AT5G56030 | 0.20824785 | undirected | NA | NA |
| ## | 4686 | AT1G15690 | AT2G41840 | 0.19221051 | undirected | NA | NA |
| ## | 4687 | AT1G15690 | AT3G60245 | 0.10137609 | undirected | NA | NA |
| ## | 4688 | AT1G15690 | AT2G08665 | 0.11764097 | undirected | NA | NA |
| ## | 4689 | AT1G15690 | AT2G42840 | 0.08178223 | undirected | NA | NA |
| ## | 4690 | AT1G15690 | AT1G72370 | 0.04233163 | undirected | NA | NA |
| ## | 4691 | AT1G15690 | AT2G05520 | 0.24084911 | undirected | NA | NA |
| ## | 4692 | AT1G15690 | AT4G22513 | 0.24761788 | undirected | NA | NA |
| ## | 4693 | AT1G15690 | AT4G22530 | 0.20078960 | undirected | NA | NA |
| ## | 4694 | AT1G15690 | ATCG01210 | 0.14413399 | undirected | NA | NA |
| ## | 4695 | AT1G15690 | AT3G25520 | 0.11738258 | undirected | NA | NA |
| ## | 4696 | AT3G52590 | AT5G07090 | 0.08013878 | undirected | NA | NA |
| ## | 4697 | AT3G52590 | AT5G17920 | 0.06616883 | undirected | NA | NA |
| ## | 4698 | AT3G52590 | AT5G56030 | 0.11910061 | undirected | NA | NA |
| ## | 4699 | AT3G52590 | AT2G41840 | 0.27038809 | undirected | NA | NA |
| ## | 4700 | AT3G52590 | AT3G60245 | 0.04673589 | undirected | NA | NA |
| ## | 4701 | AT3G52590 | AT3G26520 | 0.04990950 | undirected | NA | NA |
| ## | 4702 | AT3G52590 | AT2G42840 | 0.12407972 | undirected | NA | NA |
| ## | 4703 | AT3G52590 | AT2G05520 | 0.17122737 | undirected | NA | NA |
| ## | 4704 | AT3G52590 | AT4G22513 | 0.18073842 | undirected | NA | NA |
| ## | 4705 | AT3G52590 | AT4G22530 | 0.17154543 | undirected | NA | NA |
| ## | 4706 | AT3G52590 | ATCG01210 | 0.21645201 | undirected | NA | NA |
| ## | 4707 | AT3G52590 | AT3G25520 | 0.03867036 | undirected | NA | NA |
| ## | 4708 | AT5G07090 | AT5G17920 | 0.03577261 | undirected | NA | NA |
| ## | 4709 | AT5G07090 | AT5G56030 | 0.22803731 | undirected | NA | NA |
| ## | 4710 | AT5G07090 | AT2G41840 | 0.19327738 | undirected | NA | NA |
| ## | 4711 | AT5G07090 | AT3G60245 | 0.20235379 | undirected | NA | NA |
| ## | 4712 | AT5G07090 | AT2G08665 | 0.24443224 | undirected | NA | NA |
| ## | 4713 | AT5G07090 | AT2G42840 | 0.14916952 | undirected | NA | NA |
| ## | 4714 | AT5G07090 | AT1G72370 | 0.08032559 | undirected | NA | NA |
| ## | 4715 | AT5G07090 | AT2G05520 | 0.24893905 | undirected | NA | NA |
| ## | 4716 | AT5G07090 | AT4G22513 | 0.25656502 | undirected | NA | NA |
| ## | 4717 | AT5G07090 | AT4G22530 | 0.22121997 | undirected | NA | NA |
| ## | 4718 | AT5G07090 | ATCG01210 | 0.17472137 | undirected | NA | NA |
| ## | 4719 | AT5G07090 | AT3G25520 | 0.25041003 | undirected | NA | NA |
| ## | 4720 | AT5G17920 | AT5G56030 | 0.10928106 | undirected | NA | NA |
| ## | 4721 | AT5G17920 | AT2G41840 | 0.29719566 | undirected | NA | NA |
| ## | 4722 | AT5G17920 | AT3G60245 | 0.10156417 | undirected | NA | NA |
| ## | 4723 | AT5G17920 | AT2G08665 | 0.02221426 | undirected | NA | NA |
| ## | 4724 | AT5G17920 | AT3G26520 | 0.10439668 | undirected | NA | NA |
| ## | 4725 | AT5G17920 | AT2G42840 | 0.25352567 | undirected | NA | NA |
| ## | 4726 | AT5G17920 | AT1G72370 | 0.06315482 | undirected | NA | NA |
| ## | 4727 | AT5G17920 | AT2G05520 | 0.16474010 | undirected | NA | NA |
| ## | 4728 | AT5G17920 | AT4G22513 | 0.14277802 | undirected | NA | NA |
| ## | 4729 | AT5G17920 | AT4G22530 | 0.17930730 | undirected | NA | NA |

| | | | | | | | |
|----|------|-----------|-----------|------------|------------|----|----|
| ## | 4730 | AT5G17920 | ATCG01210 | 0.28225805 | undirected | NA | NA |
| ## | 4731 | AT5G17920 | AT3G25520 | 0.04797286 | undirected | NA | NA |
| ## | 4732 | AT5G56030 | AT2G41840 | 0.23965559 | undirected | NA | NA |
| ## | 4733 | AT5G56030 | AT3G60245 | 0.29365781 | undirected | NA | NA |
| ## | 4734 | AT5G56030 | AT2G08665 | 0.19755866 | undirected | NA | NA |
| ## | 4735 | AT5G56030 | AT2G42840 | 0.25307232 | undirected | NA | NA |
| ## | 4736 | AT5G56030 | AT1G72370 | 0.17522069 | undirected | NA | NA |
| ## | 4737 | AT5G56030 | AT2G05520 | 0.29582819 | undirected | NA | NA |
| ## | 4738 | AT5G56030 | AT4G22513 | 0.30856331 | undirected | NA | NA |
| ## | 4739 | AT5G56030 | AT4G22530 | 0.26800681 | undirected | NA | NA |
| ## | 4740 | AT5G56030 | ATCG01210 | 0.23644391 | undirected | NA | NA |
| ## | 4741 | AT5G56030 | AT3G25520 | 0.21772407 | undirected | NA | NA |
| ## | 4742 | AT2G41840 | AT3G60245 | 0.29416015 | undirected | NA | NA |
| ## | 4743 | AT2G41840 | AT2G08665 | 0.25270339 | undirected | NA | NA |
| ## | 4744 | AT2G41840 | AT3G26520 | 0.09093128 | undirected | NA | NA |
| ## | 4745 | AT2G41840 | AT2G42840 | 0.45229200 | undirected | NA | NA |
| ## | 4746 | AT2G41840 | AT1G72370 | 0.22862788 | undirected | NA | NA |
| ## | 4747 | AT2G41840 | AT2G05520 | 0.32480438 | undirected | NA | NA |
| ## | 4748 | AT2G41840 | AT4G22513 | 0.31279426 | undirected | NA | NA |
| ## | 4749 | AT2G41840 | AT4G22530 | 0.37619491 | undirected | NA | NA |
| ## | 4750 | AT2G41840 | ATCG01210 | 0.45248764 | undirected | NA | NA |
| ## | 4751 | AT2G41840 | AT3G25520 | 0.30133724 | undirected | NA | NA |
| ## | 4752 | AT3G60245 | AT2G08665 | 0.18185218 | undirected | NA | NA |
| ## | 4753 | AT3G60245 | AT3G26520 | 0.02068492 | undirected | NA | NA |
| ## | 4754 | AT3G60245 | AT2G42840 | 0.21856087 | undirected | NA | NA |
| ## | 4755 | AT3G60245 | AT1G72370 | 0.18445143 | undirected | NA | NA |
| ## | 4756 | AT3G60245 | AT2G05520 | 0.33149799 | undirected | NA | NA |
| ## | 4757 | AT3G60245 | AT4G22513 | 0.30261756 | undirected | NA | NA |
| ## | 4758 | AT3G60245 | AT4G22530 | 0.27437302 | undirected | NA | NA |
| ## | 4759 | AT3G60245 | ATCG01210 | 0.25094355 | undirected | NA | NA |
| ## | 4760 | AT3G60245 | AT3G25520 | 0.19691050 | undirected | NA | NA |
| ## | 4761 | AT2G08665 | AT2G42840 | 0.14222000 | undirected | NA | NA |
| ## | 4762 | AT2G08665 | AT1G72370 | 0.05461811 | undirected | NA | NA |
| ## | 4763 | AT2G08665 | AT2G05520 | 0.26069852 | undirected | NA | NA |
| ## | 4764 | AT2G08665 | AT4G22513 | 0.24167127 | undirected | NA | NA |
| ## | 4765 | AT2G08665 | AT4G22530 | 0.24340733 | undirected | NA | NA |
| ## | 4766 | AT2G08665 | ATCG01210 | 0.20666711 | undirected | NA | NA |
| ## | 4767 | AT2G08665 | AT3G25520 | 0.16266640 | undirected | NA | NA |
| ## | 4768 | AT3G26520 | AT2G42840 | 0.12350271 | undirected | NA | NA |
| ## | 4769 | AT3G26520 | AT1G72370 | 0.05553220 | undirected | NA | NA |
| ## | 4770 | AT3G26520 | AT2G05520 | 0.04521341 | undirected | NA | NA |
| ## | 4771 | AT3G26520 | AT4G22513 | 0.02699443 | undirected | NA | NA |
| ## | 4772 | AT3G26520 | AT4G22530 | 0.07085937 | undirected | NA | NA |
| ## | 4773 | AT3G26520 | ATCG01210 | 0.11462241 | undirected | NA | NA |
| ## | 4774 | AT2G42840 | AT1G72370 | 0.31942838 | undirected | NA | NA |
| ## | 4775 | AT2G42840 | AT2G05520 | 0.36163629 | undirected | NA | NA |
| ## | 4776 | AT2G42840 | AT4G22513 | 0.30833692 | undirected | NA | NA |
| ## | 4777 | AT2G42840 | AT4G22530 | 0.36855619 | undirected | NA | NA |
| ## | 4778 | AT2G42840 | ATCG01210 | 0.42231692 | undirected | NA | NA |
| ## | 4779 | AT2G42840 | AT3G25520 | 0.17916964 | undirected | NA | NA |

```

## 4780 AT1G72370 AT2G05520 0.23918973 undirected NA NA
## 4781 AT1G72370 AT4G22513 0.17757253 undirected NA NA
## 4782 AT1G72370 AT4G22530 0.25237383 undirected NA NA
## 4783 AT1G72370 ATCG01210 0.25853407 undirected NA NA
## 4784 AT1G72370 AT3G25520 0.08700347 undirected NA NA
## 4785 AT2G05520 AT4G22513 0.32549869 undirected NA NA
## 4786 AT2G05520 AT4G22530 0.35205936 undirected NA NA
## 4787 AT2G05520 ATCG01210 0.34193840 undirected NA NA
## 4788 AT2G05520 AT3G25520 0.29575712 undirected NA NA
## 4789 AT4G22513 AT4G22530 0.32124980 undirected NA NA
## 4790 AT4G22513 ATCG01210 0.30906394 undirected NA NA
## 4791 AT4G22513 AT3G25520 0.25593845 undirected NA NA
## 4792 AT4G22530 ATCG01210 0.35139702 undirected NA NA
## 4793 AT4G22530 AT3G25520 0.29219719 undirected NA NA
## 4794 ATCG01210 AT3G25520 0.26404513 undirected NA NA

```

```
##
```

```
## $nodeData
```

```

##      nodeName altName nodeAttr.nodesPresent...
## 1      AT3G41768      NA
## 2      AT2G01010      NA
## 3      AT1G29930      NA
## 4      AT2G21660      NA
## 5      AT4G22485      NA
## 6      AT4G22505      NA
## 7      AT5G60390      NA
## 8      AT1G56070      NA
## 9      AT5G02380      NA
## 10     AT4G22475      NA
## 11     AT5G02500      NA
## 12     AT4G22490      NA
## 13     AT4G21960      NA
## 14     AT2G30860      NA
## 15     AT3G08580      NA
## 16     AT1G78370      NA
## 17     AT4G22510      NA
## 18     AT1G07590      NA
## 19     AT3G12145      NA
## 20     AT5G54770      NA
## 21     AT1G67090      NA
## 22     AT1G62500      NA
## 23     AT2G38540      NA
## 24     AT1G13710      NA
## 25     AT4G03210      NA
## 26     AT3G22121      NA
## 27     AT5G09220      NA
## 28     AT4G22517      NA
## 29     AT3G16640      NA
## 30     AT4G34870      NA
## 31     AT4G29030      NA
## 32     AT2G02100      NA

```

| | | | |
|-------|-----------|----|----|
| ## 33 | AT3G05727 | NA | NA |
| ## 34 | AT5G27850 | NA | NA |
| ## 35 | AT1G43170 | NA | NA |
| ## 36 | AT4G22495 | NA | NA |
| ## 37 | AT3G09200 | NA | NA |
| ## 38 | AT1G14320 | NA | NA |
| ## 39 | AT1G13930 | NA | NA |
| ## 40 | AT2G36530 | NA | NA |
| ## 41 | AT3G49910 | NA | NA |
| ## 42 | AT2G34480 | NA | NA |
| ## 43 | AT5G02960 | NA | NA |
| ## 44 | AT2G18020 | NA | NA |
| ## 45 | AT1G13440 | NA | NA |
| ## 46 | AT2G16600 | NA | NA |
| ## 47 | AT1G07920 | NA | NA |
| ## 48 | AT1G04410 | NA | NA |
| ## 49 | AT2G36830 | NA | NA |
| ## 50 | AT3G15353 | NA | NA |
| ## 51 | AT1G62480 | NA | NA |
| ## 52 | AT5G38940 | NA | NA |
| ## 53 | ATCG01180 | NA | NA |
| ## 54 | AT1G07930 | NA | NA |
| ## 55 | ATCG00950 | NA | NA |
| ## 56 | AT3G13920 | NA | NA |
| ## 57 | AT1G28290 | NA | NA |
| ## 58 | AT1G04270 | NA | NA |
| ## 59 | AT4G35100 | NA | NA |
| ## 60 | AT5G48480 | NA | NA |
| ## 61 | AT1G52400 | NA | NA |
| ## 62 | AT3G02470 | NA | NA |
| ## 63 | AT5G15200 | NA | NA |
| ## 64 | AT5G48485 | NA | NA |
| ## 65 | AT1G20620 | NA | NA |
| ## 66 | AT2G27720 | NA | NA |
| ## 67 | AT5G02870 | NA | NA |
| ## 68 | AT4G15000 | NA | NA |
| ## 69 | AT5G20290 | NA | NA |
| ## 70 | AT4G31700 | NA | NA |
| ## 71 | AT3G04400 | NA | NA |
| ## 72 | AT3G02230 | NA | NA |
| ## 73 | AT1G54410 | NA | NA |
| ## 74 | AT3G24830 | NA | NA |
| ## 75 | AT1G48920 | NA | NA |
| ## 76 | AT3G08770 | NA | NA |
| ## 77 | AT3G05590 | NA | NA |
| ## 78 | AT4G38680 | NA | NA |
| ## 79 | AT3G04840 | NA | NA |
| ## 80 | AT2G28790 | NA | NA |
| ## 81 | AT1G70600 | NA | NA |
| ## 82 | AT4G27090 | NA | NA |

| | | | |
|--------|-----------|----|----|
| ## 83 | AT1G77510 | NA | NA |
| ## 84 | AT1G70830 | NA | NA |
| ## 85 | AT1G15690 | NA | NA |
| ## 86 | AT3G52590 | NA | NA |
| ## 87 | AT5G07090 | NA | NA |
| ## 88 | AT5G17920 | NA | NA |
| ## 89 | AT5G56030 | NA | NA |
| ## 90 | AT2G41840 | NA | NA |
| ## 91 | AT3G60245 | NA | NA |
| ## 92 | AT2G08665 | NA | NA |
| ## 93 | AT3G26520 | NA | NA |
| ## 94 | AT2G42840 | NA | NA |
| ## 95 | AT1G72370 | NA | NA |
| ## 96 | AT2G05520 | NA | NA |
| ## 97 | AT4G22513 | NA | NA |
| ## 98 | AT4G22530 | NA | NA |
| ## 99 | ATCG01210 | NA | NA |
| ## 100 | AT3G25520 | NA | NA |
| ## 101 | ATCG00920 | NA | NA |
| ## 102 | AT4G30140 | NA | NA |
| ## 103 | AT1G67430 | NA | NA |
| ## 104 | AT2G43460 | NA | NA |
| ## 105 | AT2G27710 | NA | NA |
| ## 106 | AT1G26630 | NA | NA |
| ## 107 | AT4G39200 | NA | NA |
| ## 108 | AT2G01250 | NA | NA |
| ## 109 | AT1G78380 | NA | NA |
| ## 110 | AT3G62250 | NA | NA |
| ## 111 | AT3G11510 | NA | NA |
| ## 112 | AT4G18100 | NA | NA |
| ## 113 | AT4G09320 | NA | NA |
| ## 114 | AT3G53460 | NA | NA |
| ## 115 | AT3G04120 | NA | NA |
| ## 116 | AT3G09630 | NA | NA |
| ## 117 | AT4G38740 | NA | NA |
| ## 118 | AT3G53020 | NA | NA |
| ## 119 | AT4G16720 | NA | NA |
| ## 120 | AT3G49010 | NA | NA |
| ## 121 | AT2G47110 | NA | NA |
| ## 122 | AT1G02780 | NA | NA |
| ## 123 | AT1G29920 | NA | NA |
| ## 124 | AT3G52930 | NA | NA |
| ## 125 | AT2G39460 | NA | NA |
| ## 126 | AT4G13940 | NA | NA |
| ## 127 | AT3G41979 | NA | NA |
| ## 128 | AT5G59850 | NA | NA |
| ## 129 | AT1G35720 | NA | NA |
| ## 130 | AT2G01020 | NA | NA |
| ## 131 | AT5G56710 | NA | NA |
| ## 132 | AT1G78040 | NA | NA |

| | | | |
|--------|-----------|----|----|
| ## 133 | AT5G10360 | NA | NA |
| ## 134 | AT1G07770 | NA | NA |
| ## 135 | AT5G01530 | NA | NA |
| ## 136 | AT1G01100 | NA | NA |
| ## 137 | AT1G18080 | NA | NA |
| ## 138 | AT2G27530 | NA | NA |
| ## 139 | ATMG00020 | NA | NA |
| ## 140 | AT5G59910 | NA | NA |
| ## 141 | AT4G21650 | NA | NA |
| ## 142 | AT5G16130 | NA | NA |
| ## 143 | AT5G47700 | NA | NA |
| ## 144 | AT4G10340 | NA | NA |
| ## 145 | AT1G69620 | NA | NA |
| ## 146 | AT1G08360 | NA | NA |
| ## 147 | AT2G18960 | NA | NA |
| ## 148 | AT1G52300 | NA | NA |
| ## 149 | AT3G09500 | NA | NA |
| ## 150 | AT3G62870 | NA | NA |
| ## 151 | AT1G07940 | NA | NA |
| ## 152 | AT5G15230 | NA | NA |
| ## 153 | AT3G12120 | NA | NA |
| ## 154 | AT4G17390 | NA | NA |
| ## 155 | AT1G16410 | NA | NA |
| ## 156 | AT3G47470 | NA | NA |
| ## 157 | AT1G09690 | NA | NA |
| ## 158 | AT4G13770 | NA | NA |
| ## 159 | AT4G16370 | NA | NA |
| ## 160 | AT2G33830 | NA | NA |
| ## 161 | AT2G42610 | NA | NA |
| ## 162 | AT3G44010 | NA | NA |
| ## 163 | AT3G09440 | NA | NA |
| ## 164 | AT3G53430 | NA | NA |
| ## 165 | AT4G33865 | NA | NA |
| ## 166 | AT3G16240 | NA | NA |
| ## 167 | AT5G18380 | NA | NA |
| ## 168 | AT1G67870 | NA | NA |
| ## 169 | AT4G39260 | NA | NA |
| ## 170 | AT3G23390 | NA | NA |
| ## 171 | AT5G02450 | NA | NA |
| ## 172 | AT4G14960 | NA | NA |
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| ## | 646 | AT1G60800 | NA | NA |
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| ## | 1000 | AT2G43970 | NA | NA |

If you want to learn more about WGCNA, you can find tutorials and examples at <https://labs.genetics.ucla.edu/horvath/CoexpressionNetwork/Rpackages/WGCNA/Tutorials/>.