Analysis summary of project cax23_test

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The analysis was run using count data imported from a precomputedcounts table file: APEX5_Hiseq_Hisat_Counts_V6_CAX23_TEST.txt

Between the samples defined in the imported counts table, the following contrastshave been computed:

B7GC-B7FL A4GC-A4FL B3GC-B3FL A8GC-A8FL

The normalization and statistical evaluation of differential gene expression has been performed using edgeR (Robinson et al., 2010) with a p-value cut-off of 0.05 and using the Benjamini-Hochberg (1995) method for multiple testing correction.

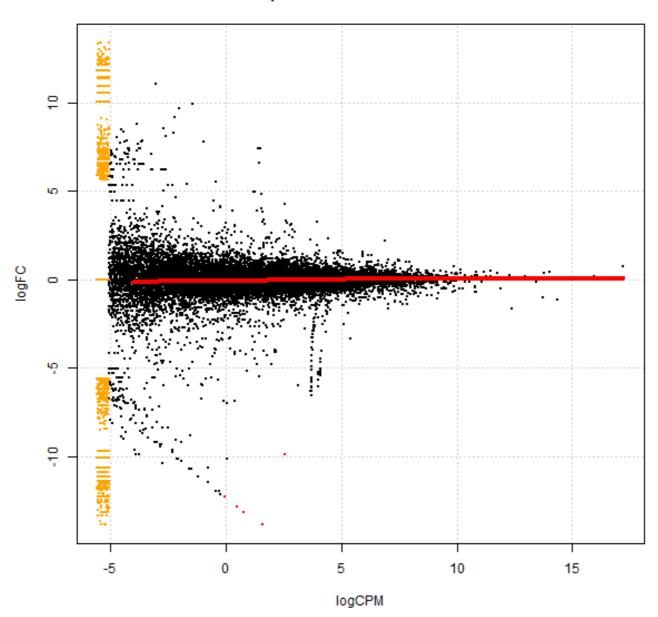
The raw data was normalized according to the default procedure of the differential expression analysis package used. The dispersion was estimated using the auto setting

MA plots of each comparison

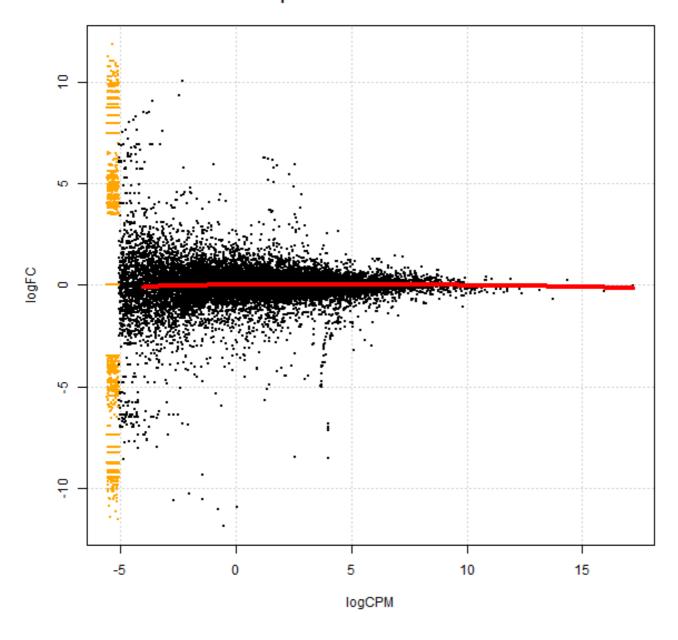
The MA plots show the log2 fold change (M; logFC) plotted versus the average expression strength (A; LogConc) for each of the comparisons that was computed. Usually, these scatter plots show a trumpet-like shape which is attributed to the fact that genes with a lower expression signal strength are more strongly affected by noise than strongly expressed genes.

According to the assumption that under most experimental conditions the bulk of the genes of an organism are not responding differentially, the cloud of points should be centered around a log fold change of 0. Genes that were called significantly differentially expressed are shown in red.

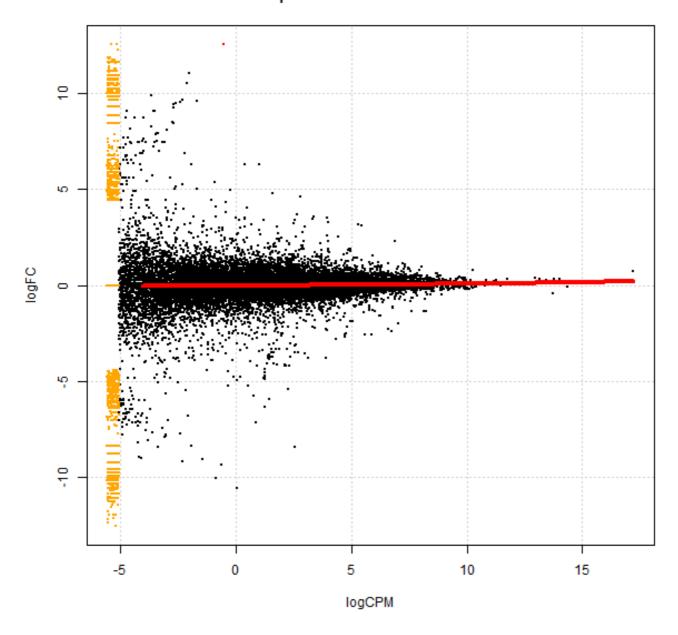
MA plot of contrast A4GC-A4FL



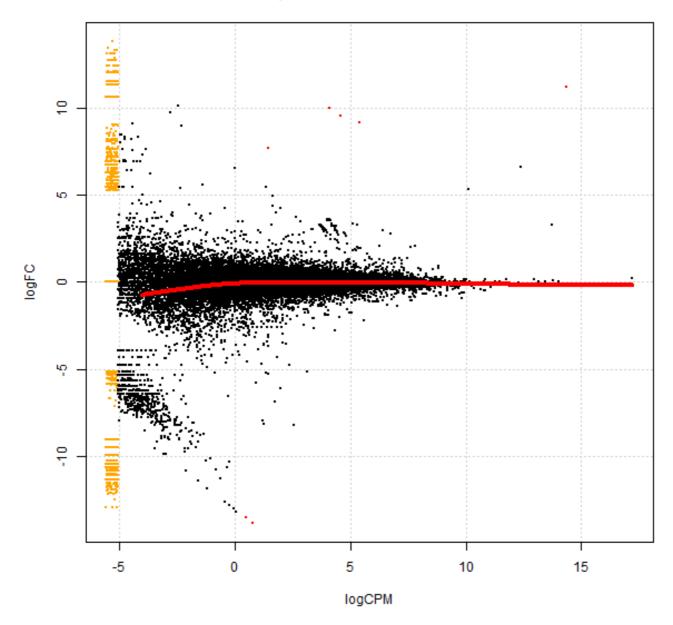
MA plot of contrast A8GC-A8FL



MA plot of contrast B3GC-B3FL



MA plot of contrast B7GC-B7FL

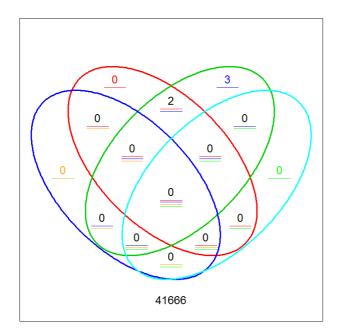


Venn Diagrams

Venn diagrams visualize the amount of genes that were called significantly differentially expressed in each comparison. The conditions are represented by circles. Genes that show a significant reponse to more than one condition are plotted in the overlapping areas while the amount of not significantly changed genes is given in the lower right corner of the plots.

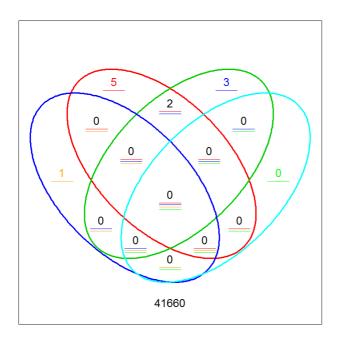
Venn diagrams allow a simple and quick overview of the impact of the treatments on the gene expression profile and also the specificity of the responses

Downregulated genes



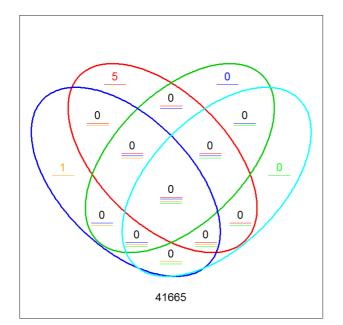
- B7GC-B7FLA4GC-A4FLB3GC-B3FLA8GC-A8FL

Significantly regulated genes



- B7GC-B7FLA4GC-A4FLB3GC-B3FLA8GC-A8FL

Upregulated genes



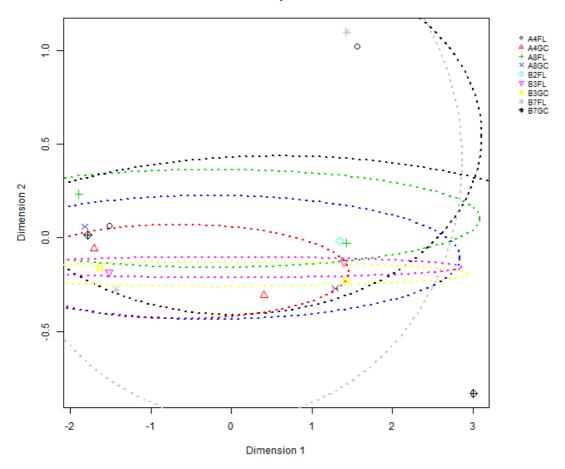
- B7GC-B7FLA4GC-A4FL
- B3GC-B3FL A8GC-A8FL

Multi-dimensional scaling (MDS) plot

The MDS or principal coordinate plot visualizes the distances between the RNA-Seq libraries in the experiment. To compute the points, a set of 500 tags(genes) that have the largest variation bewteen the libraries (i.e. the largest tagwise dispersion when treating all libraries as one experimental group) is selected. The distance between each pair of libraries is equivalent to the square root of the common disperion between these two libraries (using the top 500 genes.

Hence, the MDS plot gives an insight into the structure of the experiment - libraries that were generated on biological replicates of the same treatment should cluster together

MDS plot



Top 10 differentially expressed genes tables for each contrast Top differentially expressed genes: full_table_A4GC-A4FL.txt

	1				Г 1
Identifier	logFC	logCPM	LR	PValue	FDR
AT3G42190 .1	- 13.8428729 567822	1.58299433 823146	26.1422888 088996	3.17161161 143373e-07	0.01321642 27460055
AT3G42190 .1	- 13.8428729 567822	1.58299433 823146	26.1422888 088996	3.17161161 143373e-07	0.01321642 27460055
AT3G42190 .1	- 13.8428729 567822	1.58299433 823146	26.1422888 088996	3.17161161 143373e-07	0.01321642 27460055
AT3G42190 .1	- 13.8428729 567822	1.58299433 823146	26.1422888 088996	3.17161161 143373e-07	0.01321642 27460055
AT3G42190 .1	- 13.8428729 567822	1.58299433 823146	26.1422888 088996	3.17161161 143373e-07	0.01321642 27460055
AT3G42190 .1	- 13.8428729 567822	1.58299433 823146	26.1422888 088996	3.17161161 143373e-07	0.01321642 27460055
AT1G26390 .1	9.89322464 97939	2.53972751 138612	24.3427394 942365	8.06300727 50765e-07	0.01639073 51671965

Identifier	logFC	logCPM	LR	PValue	FDR
AT1G26390 .1	- 9.89322464 97939	2.53972751 138612	24.3427394 942365	8.06300727 50765e-07	0.01639073 51671965
AT1G26390 .1	- 9.89322464 97939	2.53972751 138612	24.3427394 942365	8.06300727 50765e-07	0.01639073 51671965
AT1G26390 .1	- 9.89322464 97939	2.53972751 138612	24.3427394 942365	8.06300727 50765e-07	0.01639073 51671965
AT1G26390 .1	- 9.89322464 97939	2.53972751 138612	24.3427394 942365	8.06300727 50765e-07	0.01639073 51671965
AT1G26390 .1	9.89322464 97939	2.53972751 138612	24.3427394 942365	8.06300727 50765e-07	0.01639073 51671965
AT3G42530 .1	- 13.1438152 656664	0.75525861 9433747	23.6095403 541834	1.18001021 09762e-06	0.01639073 51671965
AT3G42530 .1	- 13.1438152 656664	0.75525861 9433747	23.6095403 541834	1.18001021 09762e-06	0.01639073 51671965
AT3G42530 .1	- 13.1438152 656664	0.75525861 9433747	23.6095403 541834	1.18001021 09762e-06	0.01639073 51671965
AT3G42530 .1	- 13.1438152 656664	0.75525861 9433747	23.6095403 541834	1.18001021 09762e-06	0.01639073 51671965
AT3G42530 .1	- 13.1438152 656664	0.75525861 9433747	23.6095403 541834	1.18001021 09762e-06	0.01639073 51671965
AT3G42530 .1	- 13.1438152 656664	0.75525861 9433747	23.6095403 541834	1.18001021 09762e-06	0.01639073 51671965
AT3G42410 .1	- 12.8450793 945288	0.46173990 3361866	22.5330380 794227	2.06560324 611853e-06	
AT3G42410 .1	- 12.8450793 945288	0.46173990 3361866	22.5330380 794227	2.06560324 611853e-06	
AT3G42410 .1	- 12.8450793 945288	0.46173990 3361866	22.5330380 794227	2.06560324 611853e-06	0.02151893 82172513
AT3G42410 .1	- 12.8450793 945288	0.46173990 3361866	22.5330380 794227	2.06560324 611853e-06	
AT3G42410 .1	- 12.8450793 945288	0.46173990 3361866	22.5330380 794227	2.06560324 611853e-06	
AT3G42410 .1	- 12.8450793 945288	0.46173990 3361866	22.5330380 794227	2.06560324 611853e-06	0.02151893 82172513
AT3G42400 .1	- 12.3165046 365195	- 0.05786643 19816898	20.6401784 758292	5.54207544 832409e-06	0.04618876 52014226

Identifier	logFC	logCPM	LR	PValue	FDR
AT3G42400	- iogi c	-	20.6401784	5.54207544	0.04618876
.1	12.3165046 365195	0.05786643 19816898	758292	832409e-06	52014226
AT3G42400 .1	- 12.3165046 365195	- 0.05786643 19816898	20.6401784 758292	5.54207544 832409e-06	0.04618876 52014226
AT3G42400 .1	- 12.3165046 365195	- 0.05786643 19816898	20.6401784 758292	5.54207544 832409e-06	0.04618876 52014226
AT3G42400 .1	- 12.3165046 365195	- 0.05786643 19816898	20.6401784 758292	5.54207544 832409e-06	0.04618876 52014226
AT3G42400 .1	- 12.3165046 365195	- 0.05786643 19816898	20.6401784 758292	5.54207544 832409e-06	0.04618876 52014226
AT3G42290 .1	- 12.1473621 046543	- 0.22327450 4161684	20.0384137 324883	7.59020073 065637e-06	0.05013806 41422686
AT3G42290 .1	- 12.1473621 046543	- 0.22327450 4161684	20.0384137 324883	7.59020073 065637e-06	0.05013806 41422686
AT3G42290 .1	- 12.1473621 046543	- 0.22327450 4161684	20.0384137 324883	7.59020073 065637e-06	0.05013806 41422686
AT3G42290 .1	- 12.1473621 046543	- 0.22327450 4161684	20.0384137 324883	7.59020073 065637e-06	0.05013806 41422686
AT3G42290 .1	- 12.1473621 046543	- 0.22327450 4161684	20.0384137 324883	7.59020073 065637e-06	0.05013806 41422686
AT3G42290 .1	- 12.1473621 046543	- 0.22327450 4161684	20.0384137 324883	7.59020073 065637e-06	0.05013806 41422686
AT3G42060 .1	- 11.9557183 307072	- 0.28805587 0930409	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42060 .1	- 11.9557183 307072	- 0.28805587 0930409	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42060 .1	- 11.9557183 307072	- 0.28805587 0930409	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42060 .1	- 11.9557183 307072	- 0.28805587 0930409	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42060 .1	- 11.9557183 307072	- 0.28805587 0930409	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42060 .1	- 11.9557183 307072	- 0.28805587 0930409	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42320 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686

Identifier	logFC	logCPM	LR	PValue	FDR
AT3G42320 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42320 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42320 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42320 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42320 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42540 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42540 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42540 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42540 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42540 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686
AT3G42540 .1	- 11.9557183 307072	- 0.41029856 6174781	19.3593636 59439	1.08286956 703803e-05	0.05013806 41422686

Top differentially expressed genes: full_table_A8GC-A8FL.txt

Identifier	logFC	logCPM	LR	PValue	FDR
ATMG0010 0.1	- 8.54388860 352808	3.99394438 900623	21.1107425 351277	4.33491169 163264e-06	0.07356143 64895546
ATMG0010 0.1	- 8.54388860 352808	3.99394438 900623	21.1107425 351277	4.33491169 163264e-06	0.07356143 64895546
ATMG0010 0.1	- 8.54388860 352808	3.99394438 900623	21.1107425 351277	4.33491169 163264e-06	
ATMG0010 0.1	- 8.54388860 352808	3.99394438 900623	21.1107425 351277	4.33491169 163264e-06	0.07356143 64895546
ATMG0010 0.1	- 8.54388860 352808	3.99394438 900623	21.1107425 351277	4.33491169 163264e-06	0.07356143 64895546

Identifier	logFC	logCPM	LR	PValue	FDR
ATMG0010	logi C	3.99394438	21.1107425		0.07356143
0.1	8.54388860 352808	900623	351277	163264e-06	64895546
AT1G26390 .1	- 8.48432924 747226	2.53972751 138612	21.0518892 06173	4.47011892 490009e-06	0.07356143 64895546
AT1G26390 .1	- 8.48432924 747226	2.53972751 138612	21.0518892 06173	4.47011892 490009e-06	0.07356143 64895546
AT1G26390 .1	- 8.48432924 747226	2.53972751 138612	21.0518892 06173	4.47011892 490009e-06	0.07356143 64895546
AT1G26390 .1	- 8.48432924 747226	2.53972751 138612	21.0518892 06173	4.47011892 490009e-06	0.07356143 64895546
AT1G26390 .1	- 8.48432924 747226	2.53972751 138612	21.0518892 06173	4.47011892 490009e-06	0.07356143 64895546
AT1G26390 .1	- 8.48432924 747226	2.53972751 138612	21.0518892 06173	4.47011892 490009e-06	0.07356143 64895546
AT2G08986 .1	- 11.8609627 342981	- 0.50868588 2312537	20.7271873 851782	5.29587265 649166e-06	0.07356143 64895546
AT2G08986 .1	- 11.8609627 342981	- 0.50868588 2312537	20.7271873 851782	5.29587265 649166e-06	0.07356143 64895546
AT2G08986 .1	- 11.8609627 342981	- 0.50868588 2312537	20.7271873 851782	5.29587265 649166e-06	0.07356143 64895546
AT2G08986 .1	- 11.8609627 342981	- 0.50868588 2312537	20.7271873 851782	5.29587265 649166e-06	0.07356143 64895546
AT2G08986 .1	- 11.8609627 342981	- 0.50868588 2312537	20.7271873 851782	5.29587265 649166e-06	
AT2G08986 .1	- 11.8609627 342981	- 0.50868588 2312537	20.7271873 851782	5.29587265 649166e-06	0.07356143 64895546
ATMG0061 0.1	- 7.14289031 18576	4.00283824 689007	17.8549490 310392	2.38398449 421599e-05	0.14328150 9305724
ATMG0061 0.1	- 7.14289031 18576	4.00283824 689007	17.8549490 310392	2.38398449 421599e-05	0.14328150 9305724
ATMG0061 0.1	- 7.14289031 18576	4.00283824 689007	17.8549490 310392	2.38398449 421599e-05	0.14328150 9305724
ATMG0061 0.1	- 7.14289031 18576	4.00283824 689007	17.8549490 310392	2.38398449 421599e-05	0.14328150 9305724
ATMG0061 0.1	- 7.14289031 18576	4.00283824 689007	17.8549490 310392	2.38398449 421599e-05	0.14328150 9305724

Identifier	logFC	logCPM	LR	PValue	FDR
ATMG0061		4.00283824	17.8549490	2.38398449	0.14328150
0.1	7.14289031 18576	689007	310392	421599e-05	9305724
AT1G32350 .1	- 11.0529933 370043	- 0.78641898 0439371	17.8430480 15431	2.39894089 516992e-05	0.14328150 9305724
AT1G32350 .1	- 11.0529933 370043	- 0.78641898 0439371	17.8430480 15431	2.39894089 516992e-05	0.14328150 9305724
AT1G32350 .1	- 11.0529933 370043	- 0.78641898 0439371	17.8430480 15431	2.39894089 516992e-05	0.14328150 9305724
AT1G32350 .1	- 11.0529933 370043	- 0.78641898 0439371	17.8430480 15431	2.39894089 516992e-05	0.14328150 9305724
AT1G32350 .1	- 11.0529933 370043	- 0.78641898 0439371	17.8430480 15431	2.39894089 516992e-05	0.14328150 9305724
AT1G32350 .1	- 11.0529933 370043	- 0.78641898 0439371	17.8430480 15431	2.39894089 516992e-05	0.14328150 9305724
ATMG0062 0.1	- 7.07899511 314352	4.00153734 582203	17.4579485 20938	2.93733545 370395e-05	0.14328150 9305724
ATMG0062 0.1	- 7.07899511 314352	4.00153734 582203	17.4579485 20938	2.93733545 370395e-05	0.14328150 9305724
ATMG0062 0.1	- 7.07899511 314352	4.00153734 582203	17.4579485 20938	2.93733545 370395e-05	0.14328150 9305724
ATMG0062 0.1	- 7.07899511 314352	4.00153734 582203	17.4579485 20938	2.93733545 370395e-05	0.14328150 9305724
ATMG0062 0.1	- 7.07899511 314352	4.00153734 582203	17.4579485 20938	2.93733545 370395e-05	0.14328150 9305724
ATMG0062 0.1	- 7.07899511 314352	4.00153734 582203	17.4579485 20938	2.93733545 370395e-05	0.14328150 9305724
AT4G31970 .1	- 10.9182785 140886	0.02788137 05815086	17.4342773 578834	2.97414054 364144e-05	0.14328150 9305724
AT4G31970 .1	- 10.9182785 140886	0.02788137 05815086	17.4342773 578834	2.97414054 364144e-05	0.14328150 9305724
AT4G31970 .1	- 10.9182785 140886	0.02788137 05815086	17.4342773 578834	2.97414054 364144e-05	0.14328150 9305724
AT4G31970 .1	- 10.9182785 140886	0.02788137 05815086	17.4342773 578834	2.97414054 364144e-05	0.14328150 9305724
AT4G31970 .1	- 10.9182785 140886	0.02788137 05815086	17.4342773 578834	2.97414054 364144e-05	0.14328150 9305724

Identifier	logFC	logCPM	LR	PValue	FDR
AT4G31970 .1	- 10.9182785 140886	0.02788137 05815086	17.4342773 578834	2.97414054 364144e-05	0.14328150 9305724
ATMG0060 0.1	- 6.98694418 347406	4.00305456 044025	17.4180901 310997	2.99957573 359022e-05	0.14328150 9305724
ATMG0060 0.1	- 6.98694418 347406	4.00305456 044025	17.4180901 310997	2.99957573 359022e-05	0.14328150 9305724
ATMG0060 0.1	- 6.98694418 347406	4.00305456 044025	17.4180901 310997	2.99957573 359022e-05	0.14328150 9305724
ATMG0060 0.1	- 6.98694418 347406	4.00305456 044025	17.4180901 310997	2.99957573 359022e-05	0.14328150 9305724
ATMG0060 0.1	- 6.98694418 347406	4.00305456 044025	17.4180901 310997	2.99957573 359022e-05	0.14328150 9305724
ATMG0060 0.1	- 6.98694418 347406	4.00305456 044025	17.4180901 310997	2.99957573 359022e-05	0.14328150 9305724
ATMG0019 0.1	- 6.83744175 359312	4.00053551 127742	16.9809615 809318	3.77565256 159775e-05	0.14328150 9305724
ATMG0019 0.1	- 6.83744175 359312	4.00053551 127742	16.9809615 809318	3.77565256 159775e-05	0.14328150 9305724
ATMG0019 0.1	- 6.83744175 359312	4.00053551 127742	16.9809615 809318	3.77565256 159775e-05	0.14328150 9305724
ATMG0019 0.1	- 6.83744175 359312	4.00053551 127742	16.9809615 809318	3.77565256 159775e-05	0.14328150 9305724
ATMG0019 0.1	- 6.83744175 359312	4.00053551 127742	16.9809615 809318	3.77565256 159775e-05	
ATMG0019 0.1	- 6.83744175 359312	4.00053551 127742	16.9809615 809318	3.77565256 159775e-05	

Top differentially expressed genes: full_table_B3GC-B3FL.txt

Identifier	logFC	logCPM	LR	PValue	FDR
AT2G08986 .1	12.5717106 217868	- 0.50868588 2312537		1.08745645 002334e-06	
AT2G08986 .1	12.5717106 217868	- 0.50868588 2312537		1.08745645 002334e-06	
AT2G08986 .1	12.5717106 217868	- 0.50868588 2312537		1.08745645 002334e-06	

Identifier	logFC	logCPM	LR	PValue	FDR
AT2G08986		- logor w	23.7667363	1.08745645	0.04531539
.1	217868	0.50868588 2312537	727953	002334e-06	77289227
AT2G08986 .1	12.5717106 217868	- 0.50868588 2312537	23.7667363 727953	1.08745645 002334e-06	0.04531539 77289227
AT2G08986 .1	12.5717106 217868	- 0.50868588 2312537	23.7667363 727953	1.08745645 002334e-06	0.04531539 77289227
AT1G26390 .1	- 8.41097349 434273	2.53972751 138612	20.7694670 699559	5.18023023 607671e-06	0.10793268 7083776
AT1G26390 .1	- 8.41097349 434273	2.53972751 138612	20.7694670 699559	5.18023023 607671e-06	0.10793268 7083776
AT1G26390 .1	- 8.41097349 434273	2.53972751 138612	20.7694670 699559	5.18023023 607671e-06	0.10793268 7083776
AT1G26390 .1	- 8.41097349 434273	2.53972751 138612	20.7694670 699559	5.18023023 607671e-06	0.10793268 7083776
AT1G26390 .1	- 8.41097349 434273	2.53972751 138612	20.7694670 699559	5.18023023 607671e-06	0.10793268 7083776
AT1G26390 .1	- 8.41097349 434273	2.53972751 138612	20.7694670 699559	5.18023023 607671e-06	0.10793268 7083776
AT2G07981 .1	11.0607757 789813	- 2.01237448 292464	18.3572139 181087	1.83124303 437048e-05	0.21255025 2288729
AT2G07981 .1	11.0607757 789813	- 2.01237448 292464	18.3572139 181087	1.83124303 437048e-05	
AT2G07981 .1	11.0607757 789813	- 2.01237448 292464	18.3572139 181087	1.83124303 437048e-05	0.21255025 2288729
AT2G07981 .1	11.0607757 789813	- 2.01237448 292464	18.3572139 181087	1.83124303 437048e-05	0.21255025 2288729
AT2G07981 .1	11.0607757 789813	- 2.01237448 292464	18.3572139 181087	1.83124303 437048e-05	0.21255025 2288729
AT2G07981 .1	11.0607757 789813	- 2.01237448 292464	18.3572139 181087	1.83124303 437048e-05	0.21255025 2288729
AT1G53480 .2	- 7.17170757 978393	0.88435150 3920179	18.1513287 037559	2.04027023 386747e-05	0.21255025 2288729
AT1G53480 .2	- 7.17170757 978393	0.88435150 3920179	18.1513287 037559	2.04027023 386747e-05	0.21255025 2288729
AT1G53480 .2	- 7.17170757 978393	0.88435150 3920179	18.1513287 037559	2.04027023 386747e-05	0.21255025 2288729

Identifier	logFC	logCPM	LR	PValue	FDR
AT1G53480	- logi O	0.88435150	18.1513287	2.04027023	0.21255025
.2	7.17170757 978393	3920179	037559	386747e-05	2288729
AT1G53480 .2	- 7.17170757 978393	0.88435150 3920179	18.1513287 037559	2.04027023 386747e-05	0.21255025 2288729
AT1G53480 .2	- 7.17170757 978393	0.88435150 3920179	18.1513287 037559	2.04027023 386747e-05	0.21255025 2288729
AT2G07750 .1	10.5285884 185343	- 2.12166531 114413	16.4952491 756775	4.87721289 624403e-05	0.39066853 8576469
AT2G07750 .1	10.5285884 185343	- 2.12166531 114413	16.4952491 756775	4.87721289 624403e-05	0.39066853 8576469
AT2G07750 .1	10.5285884 185343	- 2.12166531 114413	16.4952491 756775	4.87721289 624403e-05	0.39066853 8576469
AT2G07750 .1	10.5285884 185343	- 2.12166531 114413	16.4952491 756775	4.87721289 624403e-05	0.39066853 8576469
AT2G07750 .1	10.5285884 185343	- 2.12166531 114413	16.4952491 756775	4.87721289 624403e-05	0.39066853 8576469
AT2G07750 .1	10.5285884 185343	- 2.12166531 114413	16.4952491 756775	4.87721289 624403e-05	0.39066853 8576469
AT4G31970 .1	- 10.5525752 167251	0.02788137 05815086	16.2248824 829526	5.62504195 113824e-05	0.39066853 8576469
AT4G31970 .1	- 10.5525752 167251	0.02788137 05815086	16.2248824 829526	5.62504195 113824e-05	0.39066853 8576469
AT4G31970 .1	- 10.5525752 167251	0.02788137 05815086	16.2248824 829526	5.62504195 113824e-05	0.39066853 8576469
AT4G31970 .1	- 10.5525752 167251	0.02788137 05815086	16.2248824 829526	5.62504195 113824e-05	0.39066853 8576469
AT4G31970 .1	- 10.5525752 167251	0.02788137 05815086	16.2248824 829526	5.62504195 113824e-05	0.39066853 8576469
AT4G31970 .1	- 10.5525752 167251	0.02788137 05815086	16.2248824 829526	5.62504195 113824e-05	0.39066853 8576469
AT2G30770 .1	- 6.35246354 726351	1.24369366 468991	14.6412303 740724	0.00013003 829072320 8	0.64473853 6903739
AT2G30770 .1	- 6.35246354 726351	1.24369366 468991	14.6412303 740724	0.00013003 829072320 8	0.64473853 6903739
AT2G30770 .1	- 6.35246354 726351	1.24369366 468991	14.6412303 740724	0.00013003 829072320 8	0.64473853 6903739

Identifier	logFC	logCPM	LR	PValue	FDR
AT2G30770 .1	- 6.35246354 726351	1.24369366 468991	14.6412303 740724	0.00013003 829072320 8	0.64473853 6903739
AT2G30770 .1	- 6.35246354 726351	1.24369366 468991	14.6412303 740724	0.00013003 829072320 8	0.64473853 6903739
AT2G30770 .1	- 6.35246354 726351	1.24369366 468991	14.6412303 740724	0.00013003 829072320 8	0.64473853 6903739
AT3G28510 .1	- 10.0409468 425899	- 0.86802343 3031217	14.5051344 703933	0.00013977 804578379	0.64473853 6903739
AT3G28510 .1	- 10.0409468 425899	- 0.86802343 3031217	14.5051344 703933	0.00013977 804578379	0.64473853 6903739
AT3G28510 .1	- 10.0409468 425899	- 0.86802343 3031217	14.5051344 703933	0.00013977 804578379	0.64473853 6903739
AT3G28510 .1	- 10.0409468 425899	- 0.86802343 3031217	14.5051344 703933	0.00013977 804578379	0.64473853 6903739
AT3G28510 .1	- 10.0409468 425899	- 0.86802343 3031217	14.5051344 703933	0.00013977 804578379	0.64473853 6903739
AT3G28510 .1	- 10.0409468 425899	- 0.86802343 3031217	14.5051344 703933	0.00013977 804578379	0.64473853 6903739
AT2G09865 .1	9.89103449 955532	- 3.67248138 231629	14.3138641 435217	0.00015472 115785648	0.64473853 6903739
AT2G09865 .1	9.89103449 955532	- 3.67248138 231629	14.3138641 435217	0.00015472 115785648	0.64473853 6903739
AT2G09865 .1	9.89103449 955532	- 3.67248138 231629	14.3138641 435217	0.00015472 115785648	0.64473853 6903739
AT2G09865 .1	9.89103449 955532	- 3.67248138 231629	14.3138641 435217	0.00015472 115785648	0.64473853 6903739
AT2G09865 .1	9.89103449 955532	- 3.67248138 231629	14.3138641 435217	0.00015472 115785648	0.64473853 6903739
AT2G09865 .1	9.89103449 955532	- 3.67248138 231629	14.3138641 435217	0.00015472 115785648	0.64473853 6903739

Top differentially expressed genes: full_table_B7GC-B7FL.txt

Identifier	logFC	logCPM	LR	PValue	FDR
AT3G41768	11.2252630 194547		33.8920004 024092	5.82577458 806959e-09	
					8

Identifier	logFC	logCPM	LR	PValue	FDR
AT3G41768 .1	11.2252630 194547	14.3462770 0502	33.8920004 024092	5.82577458 806959e-09	0.00024276 585285944 8
AT3G41768 .1	11.2252630 194547	14.3462770 0502	33.8920004 024092	5.82577458 806959e-09	0.00024276 585285944 8
AT3G41768 .1	11.2252630 194547	14.3462770 0502	33.8920004 024092	5.82577458 806959e-09	0.00024276 585285944 8
AT3G41768 .1	11.2252630 194547	14.3462770 0502	33.8920004 024092	5.82577458 806959e-09	0.00024276 585285944 8
AT3G41768 .1	11.2252630 194547	14.3462770 0502	33.8920004 024092	5.82577458 806959e-09	0.00024276 585285944 8
AT2G01010	10.0098263	4.07293470	28.9834383	7.29997471	0.00152098
.1	025077	578351	92165	181411e-08	623108003
AT2G01010	10.0098263	4.07293470	28.9834383	7.29997471	0.00152098
.1	025077	578351	92165	181411e-08	623108003
AT2G01010	10.0098263	4.07293470	28.9834383	7.29997471	0.00152098
.1	025077	578351	92165	181411e-08	623108003
AT2G01010	10.0098263	4.07293470	28.9834383	7.29997471	0.00152098
.1	025077	578351	92165	181411e-08	623108003
AT2G01010	10.0098263	4.07293470	28.9834383	7.29997471	0.00152098
.1	025077	578351	92165	181411e-08	623108003
AT2G01010	10.0098263	4.07293470	28.9834383	7.29997471	0.00152098
.1	025077	578351	92165	181411e-08	623108003
AT2G01020	9.52324945	4.56716621	27.4184241	1.63862626	0.00227610
.1	392804	673	189837	12011e-07	64976837
AT2G01020	9.52324945	4.56716621	27.4184241	1.63862626	0.00227610
.1	392804	673	189837	12011e-07	64976837
AT2G01020	9.52324945	4.56716621	27.4184241	1.63862626	0.00227610
.1	392804	673	189837	12011e-07	64976837
AT2G01020	9.52324945	4.56716621	27.4184241	1.63862626	0.00227610
.1	392804	673	189837	12011e-07	64976837
AT2G01020	9.52324945	4.56716621	27.4184241	1.63862626	0.00227610
.1	392804	673	189837	12011e-07	64976837
AT2G01020	9.52324945	4.56716621	27.4184241	1.63862626	0.00227610
.1	392804	673	189837	12011e-07	64976837
AT3G41979	9.12449411	5.39933726	26.1205580	3.20750711	0.00334150
.1	328419	106797	066237	966362e-07	072958757
AT3G41979	9.12449411	5.39933726	26.1205580	3.20750711	0.00334150
.1	328419	106797	066237	966362e-07	072958757
AT3G41979	9.12449411	5.39933726	26.1205580	3.20750711	0.00334150
.1	328419	106797	066237	966362e-07	072958757
AT3G41979	9.12449411	5.39933726	26.1205580	3.20750711	0.00334150
.1	328419	106797	066237	966362e-07	072958757
AT3G41979	9.12449411	5.39933726	26.1205580	3.20750711	0.00334150
.1	328419	106797	066237	966362e-07	072958757
AT3G41979	9.12449411	5.39933726	26.1205580	3.20750711	0.00334150
.1	328419	106797	066237	966362e-07	072958757
AT3G42530 .1	- 13.8288948 980236	0.75525861 9433747	21.5672736 708259	3.41631770 994444e-06	

Identifier	logFC	logCPM	LR	PValue	FDR
AT3G42530 .1	- 13.8288948 980236	0.75525861 9433747	21.5672736 708259	3.41631770 994444e-06	0.02847227 50582189
AT3G42530 .1	- 13.8288948 980236	0.75525861 9433747	21.5672736 708259	3.41631770 994444e-06	0.02847227 50582189
AT3G42530 .1	- 13.8288948 980236	0.75525861 9433747	21.5672736 708259	3.41631770 994444e-06	0.02847227 50582189
AT3G42530 .1	- 13.8288948 980236	0.75525861 9433747	21.5672736 708259	3.41631770 994444e-06	0.02847227 50582189
AT3G42530 .1	- 13.8288948 980236	0.75525861 9433747	21.5672736 708259	3.41631770 994444e-06	0.02847227 50582189
AT3G42410 .1	- 13.5299742 377142	0.46173990 3361866	20.5066619 167667	5.94240677 006171e-06	0.04023705 20808808
AT3G42410 .1	- 13.5299742 377142	0.46173990 3361866	20.5066619 167667	5.94240677 006171e-06	0.04023705 20808808
AT3G42410 .1	- 13.5299742 377142	0.46173990 3361866	20.5066619 167667	5.94240677 006171e-06	0.04023705 20808808
AT3G42410 .1	- 13.5299742 377142	0.46173990 3361866	20.5066619 167667	5.94240677 006171e-06	0.04023705 20808808
AT3G42410 .1	- 13.5299742 377142	0.46173990 3361866	20.5066619 167667	5.94240677 006171e-06	0.04023705 20808808
AT3G42410 .1	- 13.5299742 377142	0.46173990 3361866	20.5066619 167667	5.94240677 006171e-06	0.04023705 20808808
ATMG0138 0.1	7.70294587 587218	1.45414322 170362	20.2602258 735386	6.75912180 092068e-06	
ATMG0138 0.1	7.70294587 587218	1.45414322 170362	20.2602258 735386	6.75912180 092068e-06	
ATMG0138 0.1	7.70294587 587218	1.45414322 170362	20.2602258 735386	6.75912180 092068e-06	
ATMG0138 0.1	7.70294587 587218	1.45414322 170362	20.2602258 735386	6.75912180 092068e-06	0.04023705 20808808
ATMG0138 0.1	7.70294587 587218	1.45414322 170362	20.2602258 735386	6.75912180 092068e-06	
ATMG0138 0.1	7.70294587 587218	1.45414322 170362	20.2602258 735386	6.75912180 092068e-06	
AT1G26390 .1	- 8.22516420 776596	2.53972751 138612	19.4196957 570806	1.04919436 031214e-05	0.05205213
AT1G26390 .1	- 8.22516420 776596	2.53972751 138612	19.4196957 570806	1.04919436 031214e-05	0.05205213 84372189
AT1G26390 .1	- 8.22516420 776596	2.53972751 138612	19.4196957 570806	1.04919436 031214e-05	

	. 50	1 0014		DV I	EDD
Identifier	logFC	logCPM	LR	PValue	FDR
AT1G26390 .1	- 8.22516420 776596	2.53972751 138612	19.4196957 570806	1.04919436 031214e-05	0.05205213 84372189
AT1G26390 .1	- 8.22516420 776596	2.53972751 138612	19.4196957 570806	1.04919436 031214e-05	0.05205213 84372189
AT1G26390 .1	- 8.22516420 776596	2.53972751 138612	19.4196957 570806	1.04919436 031214e-05	0.05205213 84372189
AT4G31970 .1	- 13.1872353 267394	0.02788137 05815086	19.2878250 11356	1.12420927 247959e-05	0.05205213 84372189
AT4G31970 .1	- 13.1872353 267394	0.02788137 05815086	19.2878250 11356	1.12420927 247959e-05	0.05205213 84372189
AT4G31970 .1	- 13.1872353 267394	0.02788137 05815086	19.2878250 11356	1.12420927 247959e-05	0.05205213 84372189
AT4G31970 .1	- 13.1872353 267394	0.02788137 05815086	19.2878250 11356	1.12420927 247959e-05	0.05205213 84372189
AT4G31970 .1	- 13.1872353 267394	0.02788137 05815086	19.2878250 11356	1.12420927 247959e-05	0.05205213 84372189
AT4G31970 .1	- 13.1872353 267394	0.02788137 05815086	19.2878250 11356	1.12420927 247959e-05	0.05205213 84372189

Literature

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Benjamini, Y., and Hochberg, Y. (1995). Controlling the false discovery rate: a practical and powerful approach to multiple testing. Journal of the Royal Statistical Society Series B, 57, 289–300.

R session information

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stats, utils
Other packages: edgeR 2.6.12, limma 3.12.3
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