

Electronic Supplementary Information S9. Changes in gene expression due to As^{III} exposure in the contrasting hairy roots.

HYBRIDIZATION 1: LIST OF UP-REGULATED GENES

| Probe Set ID | Fold Change ([0.1.HR] vs [0.HR]) | Blast2GO description | Genbank Accessions |
|---------------|-------------------------------------|---|--------------------|
| BT2M444_at | 101.525 | Serine/threonine-protein phosphatase 7 long form homolog | AJ538927 |
| DV159578_at | 67.016 | Retrotransposon Tnt1 s231d long terminal repeat | DV159578 |
| EB427540_at | 49.6314 | DNA repair metallo-beta-lactamase family protein | EB427540 |
| C3356_at | 39.8605 | Late embryogenesis abundant domain-containing protein | DV157779 |
| C7375_at | 39.0452 | wall-associated serine threonine kinase | BP525596 |
| C11724_at | 37.103 | 5' exonuclease Apollo-like, transcript variant 2 | AJ718369 |
| EB682553_at | 36.7071 | EIF4A-2 | EB682553 |
| U92011_at | 34.5134 | apocytochrome b | U92011 |
| C5842_at | 33.8783 | heat shock protein 90 | EB432766 |
| AF211619_at | 31.8765 | | AF211619 |
| BC1M4448_s_at | 31.2217 | | AJ538430 |
| TT39_L17_at | 29.7963 | lysine-ketoglutarate reductase | |
| EB429701_at | 29.3945 | | EB429701 |
| BP137485_at | 29.0749 | Retrotransposon Tnt1 s231d long terminal repeat | BP137485 |
| CV021716_at | 28.8452 | Plastocyanin-like domain-containing protein | CV021716 |
| DW002835_at | 27.8539 | peroxidase | DW002835 |
| EB429725_at | 27.6171 | Carbonic anhydrase, transcript variant 1 (ca1), mRNA | EB429725 |
| TT19_B11_at | 26.3284 | 50s ribosomal protein l16 | |
| DV158314_at | 24.4108 | | DV158314 |
| C7180_at | 23.668 | cytochrome oxidase subunit i | BP528067 |
| EB445091_at | 22.6679 | lysine-ketoglutarate reductase | EB445091 |

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|---------------|---------|--|----------|
| GC227C_at | 22.6051 | ATPase subunit 9 gene | |
| C9897_at | 21.9446 | hort-chain dehydrogenase/reductase | |
| C5541_at | 21.8297 | lactoylglutathione lyase family protein glyoxalase | EB438261 |
| EB643469_at | 21.5932 | 60s acidic ribosomal protein p1 | EB643469 |
| TT03_E19_at | 21.5008 | | |
| EB430306_s_at | 21.2096 | heat shock protein 82 | EB430306 |
| BP528038_at | 21.2079 | retroviral-like transposon Tnt 1-94 | BP528038 |
| C2925_at | 20.9415 | Serine-glyoxylate aminotransferase-like | DV159853 |
| AJ632753_at | 19.7838 | | AJ632753 |
| C8177_at | 19.2239 | Nicotiana tabacum UP-9A | BP534005 |
| C5145_s_at | 19.1596 | methionine gamma-lyase | EB440770 |
| C9143_at | 18.6385 | lipoxygenase | X84040 |
| C4952_at | 18.1376 | proline oxidase/dehydrogenase 1 (PROX1) | EB442065 |
| C10612_at | 17.7431 | lactoylglutathione lyase family protein glyoxalase | DV999688 |
| CV019875_x_at | 17.6693 | | CV019875 |
| BT1M4115_at | 17.5673 | F-box protein At5g07610-like | AJ538819 |
| TT47_C04_at | 17.182 | lactoylglutathione lyase family protein glyoxalase | |
| TT40_B19_at | 17.0547 | Major facilitator superfamily protein | |
| EB444453_at | 17.0512 | | |
| C4499_at | 16.8482 | glutathione s-transferase | EB444453 |
| C1231_s_at | 16.7069 | malate synthase | EB445649 |
| EB680720_at | 16.2006 | atpase subunit 8 | EB677524 |
| X63106_at | 16.1248 | heat shock protein 70 | EB680720 |
| C6117_at | 16.0391 | heat shock protein | X63106 |
| C8646_at | 15.9445 | chitinase | EB429529 |
| BP533429_at | 15.7715 | | CV019934 |
| C506_at | 15.1734 | APR3 adenosine 5'-phosphosulfate reductase | BP533429 |
| BP531956_at | 15.098 | RNA helicase VDL (VDL) gene | EB681340 |

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|---------------|---------|--|----------|
| TT03_O23_at | 14.78 | aldose 1-epimerase | BP531956 |
| C4145_at | 14.7798 | chlorophyll a/b-protein complex of Photosystem II (| |
| EB432568_at | 14.4416 | APR1 APS reductase 1 | EB448243 |
| AJ717868_at | 14.2754 | | EB432568 |
| CV019875_at | 14.2579 | | AJ717868 |
| EB424731_s_at | 13.8934 | cytosolic purine 5'-nucleotidase-like | CV019875 |
| DV159109_at | 13.6619 | glycine-rich protein / oleosin | EB424731 |
| TT20_K20_at | 13.6451 | WRAF2 mRNA for wound-responsive AP2 like factor 2 | DV159109 |
| BP131163_at | 13.6292 | | |
| TT35_A07_at | 13.606 | UDP-glucose flavonoid 3-O-glucosyltransferase 3-like | BP131163 |
| C10843_s_at | 13.5037 | Chloroplast heat shock protein-binding protein | |
| TT47_C24_at | 13.5017 | selenium-binding protein | DW000227 |
| C5269_at | 13.4721 | Expansin-like B1 | |
| AB210290_at | 13.4405 | | EB440002 |
| BP135203_at | 13.3208 | | AB210290 |
| C3462_at | 13.3038 | ATP synthase subunit 9, mitochondrial | BP135203 |
| C2117_x_at | 13.2652 | 1-aminocyclopropane-1-carboxylate oxidase 4 | EB451960 |
| EB428562_at | 13.2537 | heat shock protein 70 | DW000224 |
| AJ632717_at | 13.2474 | | EB428562 |
| C3912_s_at | 13.17 | | AJ632717 |
| BP530384_at | 12.7445 | mitochondrion | EB449715 |
| C1241_s_at | 12.625 | Glycine-rich protein / oleosin | BP530384 |
| C6090_at | 12.4843 | methionine gamma-lyase | EB677486 |
| C6266_at | 12.4164 | acyl-activating enzyme 17 (AAE17) | EB429856 |
| C3134_at | 12.3577 | malate synthase | EB428408 |
| C1463_s_at | 12.2629 | proline oxidase/dehydrogenase 2 (PROX2) | DV158814 |
| C10084_at | 12.228 | indole-3-acetic acid-induced protein ARG7-like | DW004233 |
| AB032546_at | 11.9739 | polyubiquitin | |

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|---------------|---------|--|----------|
| EB451598_at | 11.9709 | | AB032546 |
| C3912_at | 11.8921 | | EB451598 |
| | | inositol 2-dehydrogenase/D-chiro-inositol 3- | |
| C1384_at | 11.6241 | dehydrogenase-like | EB449715 |
| DV159331_at | 11.5777 | alkaline alpha-galactosidase seed imbibition protein (SIP) | DW004644 |
| EB436466_s_at | 11.5455 | mitochondria protein homolog | DV159331 |
| EB431293_at | 11.478 | cytosolic purine 5'-nucleotidase | EB436466 |
| EB678365_at | 11.3778 | Chromatin modification-related protein EAF6 | EB431293 |
| BP130464_at | 11.188 | Plastocyanin-like domain-containing protein | EB678365 |
| C10869_at | 11.1855 | lea protein | BP130464 |
| CN824887_at | 11.1792 | 4-coumarate--CoA ligase-like 1 | |
| C9928_at | 10.7488 | alpha beta hydrolase fold | CN824887 |
| EB682437_at | 10.7288 | probable Xaa-Pro aminopeptidase P-like | EB430594 |
| C9055_at | 10.7149 | 26S proteasome non-ATPase regulatory subunit 1-like | EB682437 |
| BP530824_at | 10.403 | Capsicum annuum UPA19 mRNA | AJ717852 |
| EB427637_at | 10.385 | Protein-tyrosine-phosphatase PTP1-like | BP530824 |
| C2313_at | 10.3149 | Chloroplast heat shock protein-binding protein | EB427637 |
| C2051_at | 10.312 | 4-hydroxyphenylpyruvate dioxygenase (vit E) | DV999234 |
| EB450324_at | 10.2673 | SRO2, RCD1 | DW000597 |
| EB438150_at | 10.2076 | | EB450324 |
| BC4M432_at | 10.1586 | protein transport protein SEC23-like | EB438150 |
| DW004733_s_at | 10.1483 | Chromatin modification-related protein EAF6 | AJ538733 |
| BT1M3124_x_at | 10.1189 | | DW004733 |
| C11038_x_at | 10.0985 | Nicotiana tabacum UP-9A mRNA | AJ538793 |
| C2417_at | 10.0918 | Serine/arginine-rich splicing factor 33 | EB445189 |
| EB643479_x_at | 10.0802 | proline dehydrogenase | DV162718 |
| BP129793_at | 9.86474 | | EB643479 |
| C435_at | 9.79083 | diacylglycerol acyltransferase | BP129793 |

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|---------------|---------|---|----------|
| AJ717975_at | 9.78113 | SRO4, RCD1 | EB681692 |
| TT32_K05_at | 9.77493 | | AJ717975 |
| TT20_M13_at | 9.75142 | methylcrotonoyl-CoA carboxylase beta chain, mitochondrial-like | |
| C5953_s_at | 9.68796 | chaperone protein 70 | |
| TT23_K24_at | 9.67575 | Nicotiana tabacum UP-9A mRNA Nicotiana tabacum proline oxidase/dehydrogenase (didiA15) mRNA | EB431543 |
| EB450398_at | 9.66617 | | |
| EB443313_at | 9.64114 | Nicotiana tabacum mitochondrial DNA | EB450398 |
| EB678509_at | 9.51844 | oleosin | EB443313 |
| C8498_at | 9.50472 | APR1 5-adenylylsulfate reductase | EB678509 |
| TT33_E11_at | 9.37569 | mechanosensitive ion channel protein 3, chloroplastic-like | BP530443 |
| BC4M3318_at | 9.34771 | wall-associated receptor kinase 3-like | |
| C6991_at | 9.34436 | phloem-specific lectin | AJ538706 |
| AJ717979_at | 9.29064 | synaptonemal complex protein 1-like | EB424810 |
| BP131586_at | 9.15917 | serine/threonine-protein kinase ULK3-like | AJ717979 |
| EB449645_s_at | 9.04022 | alpha-amylase | BP131586 |
| TT15_C12_at | 9.03924 | | EB449645 |
| BP534632_at | 8.99757 | EMB2597 | |
| BT44M24_at | 8.8781 | fatty acid amide hydrolase-like Nicotiana tabacum DNA, presumably centromeric region, | BP534632 |
| BP531924_at | 8.87305 | BAC clone | AJ539074 |
| BP534042_at | 8.80136 | Chromosome-associated kinesin-like protein | BP531924 |
| C11690_at | 8.67556 | | BP534042 |
| DV162265_at | 8.61792 | HEAVY METAL ATPASE 5, HMA5 | AJ719169 |
| C5953_at | 8.53316 | HEAT SHOCK PROTEIN 70 | DV162265 |
| C11463_at | 8.45638 | | EB431543 |
| EB445138_at | 8.43351 | | BP530060 |
| C10426_at | 8.41814 | Nuclear transport factor 2 (NTF2) family protein | EB445138 |

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| BP531744_s_at | 8.34803 | Multiprotein-bridging factor 1c | EB432597 |
| EB446762_s_at | 8.3261 | | BP531744 |
| EB681943_at | 8.29901 | xanthine dehydrogenase | EB446762 |
| BC2M4121_at | 8.27501 | dynamamin 3 | EB681943 |
| C8103_at | 8.19375 | activated malate transporter | AJ538518 |
| EB446762_at | 8.1859 | | BP534838 |
| C6489_at | 8.15972 | | EB446762 |
| C3863_at | 8.13607 | Probable galactinol-sucrose galactosyltransferase 6 | EB427399 |
| TT02_J08_at | 8.13187 | transducin beta-like protein 3-like | EB449916 |
| EB678713_at | 8.12345 | G protein-coupled receptor-like protein | |
| BP532514_at | 8.09627 | | EB678713 |
| C10601_at | 8.06878 | Nicotiana tabacum mitochondrial DNA, | BP532514 |
| BC1M2232_at | 8.05083 | | BP533038 |
| EB427388_at | 8.01603 | Fatty acid amide hydrolase | AJ538396 |
| BT1M3124_at | 8.00393 | | EB427388 |
| | | Acyl-CoA N-acyltransferase with RING/FYVE/PHD-type zinc | |
| TT10_N12_at | 7.95978 | finger | AJ538793 |
| EB449731_at | 7.95663 | 3-hydroxyisobutyrate dehydrogenase | |
| C11418_at | 7.89407 | Nicotiana tabacum UP-9A mRNA | EB449731 |
| BP530000_at | 7.88028 | Galactose oxidase/kelch repeat superfamily protein | BP533592 |
| C7263_at | 7.87479 | 4-coumarate--CoA ligase-like 1 | BP530000 |
| BC1M128_at | 7.69121 | ATP sulfurylase | BP526870 |
| BP530569_at | 7.67431 | fibrillarlin | AJ538380 |
| EB682912_at | 7.65126 | ABC transporter | BP530569 |
| C9586_at | 7.60446 | Serine/arginine-rich splicing factor 33 | EB682912 |
| C351_at | 7.59491 | udp-glucose 4-epimerase | |
| | | Zinc finger AN1 domain-containing stress-associated | |
| C8120_at | 7.58364 | protein 12 | EB682214 |
| C11412_at | 7.58053 | | BP534647 |

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|---------------|---|----------|
| BP528418_at | 7.54417 | |
| DW003409_at | 7.53103 | BP528418 |
| EB430444_at | 7.49503 polyubiquitin | DW003409 |
| C9165_at | 7.49314 heat shock protein 90 | EB430444 |
| AJ344536_s_at | 7.48861 cullin 1 | X63195 |
| TT23_D23_s_at | 7.46976 peptidyl-prolyl cis-trans isomerase FKBP20-2 | AJ344536 |
| C10654_at | 7.46182 threonyl-trna synthetase | |
| | probable alpha,alpha-trehalose-phosphate synthase [UDP- | |
| TT23_I22_at | 7.45024 forming] | |
| DV160812_at | 7.4403 dnaJ homolog subfamily B member 13-like (heat shock protein) | |
| BP526155_at | 7.43795 ion channel protein 3 | DV160812 |
| C5328_at | 7.42207 Methyl-CpG-binding domain-containing protein 11 | BP526155 |
| BP535324_at | 7.3519 Mitochondrial carrier protein MTM1 | EB439611 |
| EB444268_at | 7.33132 putative PAP-specific phosphatase, mitochondrial-like | BP535324 |
| | 2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase | |
| C7012_at | 7.32713 superfamily protein; | EB444268 |
| C9364_at | 7.3179 allene oxide synthase a member of the cytochrome p450 | EB424674 |
| BP531863_at | 7.30057 | AF070976 |
| BP531808_at | 7.28299 dna polymerase zeta catalytic subunit | BP531863 |
| C11006_at | 7.27292 Chaperone DnaJ-domain containing protein 3 | BP531808 |
| C3421_at | 7.24955 FGGY family of carbohydrate kinase | AJ344584 |
| C2554_at | 7.23326 | EB643473 |
| DV160238_at | 7.21498 aldose 1-epimerase | DV161848 |
| C11016_at | 7.20914 elongation factor 1 homolog | DV160238 |
| C1463_at | 7.15652 proline dehydrogenase | |
| GC174_at | 7.14707 aquaporin TIP3-2-like | DW004233 |
| TT33_K04_at | 7.13515 ubiquitin-conjugating enzyme E2 23-like | |
| C10856_at | 7.11557 peptidyl-prolyl cis-trans isomerase FKBP20-2 | |
| BP130204_at | 7.09366 | EB437088 |

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|---------------|---------|--|----------|
| C2077_at | 7.07758 | aldose reductase Solanum lycopersicum clustered mitochondria protein | BP130204 |
| EB436466_at | 7.06391 | homolog | DW000438 |
| C5590_at | 7.02569 | heat shock protein 90 | EB436466 |
| BP130931_at | 6.99098 | dna polymerase delta catalytic subunit | EB437835 |
| EB680914_at | 6.98556 | HEAT repeat-containing protein 7A homolog | BP130931 |
| C3083_at | 6.97203 | tuftelin interacting protein 11 | EB680914 |
| DW003300_at | 6.92499 | asparagine synthetase b | DV159070 |
| C7285_at | 6.92342 | putative 11-zinc finger protein | DW003300 |
| C635_s_at | 6.88706 | alpha-amylase | BP526616 |
| C8110_at | 6.86032 | FACT complex subunit SPT16 | EB680611 |
| BP533822_at | 6.80481 | transducin wd-40 repeat | BP534697 |
| BP137193_at | 6.78906 | | BP533822 |
| BP535462_at | 6.78305 | | BP137193 |
| BP130441_at | 6.77423 | | BP535462 |
| DW004672_at | 6.76151 | | BP130441 |
| CV021233_x_at | 6.74825 | polyubiquitin | DW004672 |
| EB428150_at | 6.72191 | 4-hydroxyphenylpyruvate dioxygenase Lhcb1*5, Lhcb1*6 genes for light harvesting chlorophyll | CV021233 |
| TT04_E12_at | 6.71497 | a/b-binding protein | EB428150 |
| AJ718227_at | 6.70484 | | |
| C6_s_at | 6.65973 | aaa-type atpase family protein | AJ718227 |
| C798_at | 6.65685 | nad-dependent epimerase dehydratase | EB684250 |
| TT30_A12_at | 6.64826 | Nicotiana tabacum mitochondrial DNA | EB679873 |
| EB437976_x_at | 6.64712 | selenium-binding protein | |
| CV016003_at | 6.64369 | | EB437976 |
| C3078_at | 6.6284 | | CV016003 |
| C2789_at | 6.62015 | | DV159089 |

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|---------------|---------|--|----------|
| C5984_at | 6.59405 | Glutathione S-transferase L3 | DV160546 |
| EB450652_at | 6.58457 | | EB431211 |
| GGCG180_at | 6.57463 | heavy metal p-type atpase | EB450652 |
| DV162327_at | 6.57399 | | |
| | | Solanum lycopersicum RNA polymerase II C-terminal | |
| BP534933_at | 6.54389 | domain phosphatase-like 2-like | DV162327 |
| C6056_at | 6.50881 | ---NA--- | BP534933 |
| C5567_at | 6.50637 | alpha-amylase | EB430307 |
| C8112_at | 6.48329 | | EB438092 |
| C3078_s_at | 6.47192 | | BP534683 |
| EB438412_at | 6.43074 | hsp70-interacting protein | DV159089 |
| EB438500_at | 6.42602 | | EB438412 |
| TT12_B04_at | 6.4056 | Solanum lycopersicum F-box protein PP2-B10-like | EB438500 |
| EB448976_at | 6.38347 | Myosin | |
| EB680544_at | 6.36506 | ABC1-like kinase that regulates vitamin E metabolism. | EB448976 |
| TT07_E10_at | 6.36207 | Transcription factor GTE10 | EB680544 |
| | | ATP-dependent RNA helicase DBP2-like, transcript variant | |
| EB677668_at | 6.36051 | 2 | |
| EB680371_at | 6.35019 | Probable WRKY transcription factor 4 | EB677668 |
| TT38_L10_at | 6.3486 | auxin-induced protein 10A5-like (LOC101247368) | EB680371 |
| TT17_A14_at | 6.29424 | Cell division control protein 48 homolog D | |
| DW005120_at | 6.27819 | binding protein | |
| EB427724_at | 6.27593 | alpha-amylase | DW005120 |
| | | Lhcb1*2, Lhcb1*3, Lhcb1*4 genes for light harvesting | |
| C8211_at | 6.25832 | chlorophyll a/b-binding protein | EB427724 |
| AF129003_at | 6.25217 | diacylglycerol acyltransferase | BP533614 |
| EB432538_at | 6.24856 | | AF129003 |
| | | Probable dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3- | |
| BP131209_s_at | 6.22858 | glucosyltransferase | EB432538 |

| | | Solanum lycopersicum acidic leucine-rich nuclear | |
|---------------|---------|--|----------------|
| EB437562_at | 6.21006 | phosphoprotein 32-related protein-like | BP131209 |
| BP133732_s_at | 6.17556 | mitochondrial dicarboxylate carrier protein | EB437562 |
| BP527531_at | 6.17335 | Myotubularin-like protein | BP133732 |
| C899_at | 6.06604 | heat shock protein 70 | BP527531 |
| EB430218_at | 6.04124 | rab3 GTPase-activating protein catalytic subunit-like | EB679372 |
| BP533466_x_at | 6.03171 | selenium binding protein 1 | EB430218 |
| EB437976_at | 6.02966 | selenium-binding protein | BP533466 |
| BP534501_at | 6.02327 | TOM1-like protein 2-like | EB437976 |
| BP131434_at | 5.98449 | lactoylglutathione lyase family protein glyoxalase i family protein | BP534501 |
| C1971_at | 5.98228 | Nicotiana tabacum putative virus-specific-signaling-pathway regulated protein mRNA | BP131434 |
| EB682212_s_at | 5.96112 | Vacuolar fusion protein CCZ1 homolog, transcript variant 1 | DW001020 |
| BP532086_at | 5.94367 | | EB682212 |
| BP526602_at | 5.90429 | autophagy putative nuclear matrix constituent protein 1-like protein- | BP532086 |
| TT09_M05_at | 5.8917 | like | BP526602 |
| TT25_L17_at | 5.88793 | translation initiation factor if-2 subunit gamma | XM_004232049.1 |
| C3684_at | 5.88396 | Glycine max protein PLANT CADMIUM RESISTANCE 8-like | |
| TT05_F22_at | 5.87407 | DEAD-box ATP-dependent RNA helicase 24-like | EB450858 |
| TT35_F17_at | 5.87337 | | XM_004229333.1 |
| DW001356_at | 5.87212 | Putative serine/threonine protein kinase | |
| C1325_at | 5.86365 | E3 ubiquitin-protein ligase UPL3 | DW001356 |
| C6498_at | 5.83867 | Nicotiana tabacum mitochondrial DNA | DW005029 |
| DW000655_at | 5.82321 | | EB427327 |
| C1339_at | 5.80838 | heat shock protein 70 | DW000655 |
| BP129237_at | 5.79642 | magnesium transporter | DW004921 |
| BP530329_at | 5.79455 | galactokinase like protein | BP129237 |

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|---------------|---------|---|----------|
| TT24_P17_at | 5.77271 | 6-phosphogluconate dehydrogenase | BP530329 |
| C10477_at | 5.76525 | 6-phosphogluconate dehydrogenase, decarboxylating 1 (| |
| C6002_at | 5.75184 | chaperone protein | |
| BP531192_at | 5.72524 | Ubiquitin-like superfamily protein | EB430968 |
| BP135460_s_at | 5.69458 | abc transporter | BP531192 |
| AJ718227_x_at | 5.67137 | | BP135460 |
| EB426548_at | 5.64705 | ERF (ethylene response factor) | AJ718227 |
| C6147_at | 5.64108 | heat shock protein 70 | EB426548 |
| TT06_P11_at | 5.62033 | serine O-acetyltransferase | EB429028 |
| BP526927_at | 5.61638 | methionine sulfoxide reductase gene | |
| BP531744_at | 5.60332 | Multiprotein-bridging factor 1c | BP526927 |
| BP526174_at | 5.60037 | RNI-like superfamily protein | BP531744 |
| TT36_I22_at | 5.59715 | DWD HYPERSENSITIVE TO UV-B 1 | BP526174 |
| C11221_at | 5.58687 | | |
| EB436648_at | 5.58215 | | |
| TT23_F23_at | 5.57414 | polyubiquitin | EB436648 |
| BP530276_s_at | 5.56014 | | |
| DW000729_at | 5.55397 | 4-hydroxyphenylpyruvate dioxygenase | BP530276 |
| TT36_K04_at | 5.54815 | branched-chain amino acid aminotransferase | DW000729 |
| TT07_N11_at | 5.54564 | ABC1-like kinase that regulates vitamin E metabolism. | |
| BP135725_at | 5.52951 | SKIP, SNW/SKI-INTERACTING PROTEIN | |
| TT14_B03_at | 5.52537 | | BP135725 |
| TT25_A08_at | 5.52182 | | |
| | | fmo1 (flavin-dependent monooxygenase 1) | |
| CN498836_at | 5.51155 | monooxygenase | |
| BP529984_at | 5.49947 | | CN498836 |
| C2026_at | 5.48466 | zinc finger (c3hc4-type ring finger) family protein | BP529984 |
| C4549_at | 5.48042 | UDP-glucose pyrophosphorylase 3 (UGP3) | DW000726 |
| C5936_s_at | 5.4703 | 17.6 kDa class I heat shock protein 3 | EB445115 |
| TT29_J08_at | 5.44944 | | EB431779 |
| C10303_at | 5.4258 | mitochondria protein homolog | |

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| EB683599_at | 5.41452 | | EB435790 |
| C10420_at | 5.39993 | Mitochondrial carrier protein MTM1 | EB683599 |
| C7922_at | 5.39908 | | |
| C5071_at | 5.39541 | ATUPF1 | BP129030 |
| TT02_J10_at | 5.38513 | | EB441274 |
| EB429849_at | 5.3848 | F-box/kelch-repeat protein At3g23880-like | |
| BP529993_at | 5.38391 | AMSH-like ubiquitin thioesterase 3 | EB429849 |
| DV161209_at | 5.38338 | serine hydroxymethyltransferase | BP529993 |
| BP530322_at | 5.38012 | | DV161209 |
| CV020764_at | 5.37223 | | BP530322 |
| C3446_s_at | 5.33266 | polyamine oxidase | CV020764 |
| C9515_at | 5.32736 | lipase family protein | EB452084 |
| BP132738_at | 5.31158 | DNA repair protein REV1 | AJ310476 |
| TT17_G22_at | 5.31014 | | BP132738 |
| C9244_at | 5.3097 | legumain vacuolar processing enzyme | |
| C8524_at | 5.30421 | transcription factor GTE8-like | AB075947 |
| C9960_x_at | 5.29973 | down-regulator of transcription 1 | BP530158 |
| TT41_J13_at | 5.27723 | alkaline alpha-galactosidase seed imbibition protein (SIP) | EB425683 |
| EB430661_at | 5.26545 | rhodanese-like domain-containing protein 4A, chloroplastic | |
| BP530582_at | 5.24889 | | EB430661 |
| DW004227_at | 5.22604 | WEB1 (weak chloroplast movement under blue light 1) | BP530582 |
| C11361_at | 5.22539 | Chalcone-flavanone isomerase family protein 2 | DW004227 |
| C10330_at | 5.21926 | ribosomal-protein S6 kinase | |
| DV160534_s_at | 5.21814 | | |
| EB680493_at | 5.1963 | serine/arginine-rich SC35-like splicing factor SCL33 | DV160534 |
| C1573_at | 5.18718 | | EB680493 |
| C9515_x_at | 5.15917 | lipase family protein | DW003539 |
| | | Pre-mRNA-splicing factor ATP-dependent RNA helicase | |
| TT14_O21_at | 5.15794 | PRP16 | AJ310476 |
| U66401_s_at | 5.15771 | glucose-6-phosphate phosphate translocator | |
| EB450322_at | 5.15279 | af385724_1 at1g13990 | U66401 |
| EB442616_at | 5.14925 | Calossin-like protein required for polar auxin transport | EB450322 |

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|---------------|---------|--|----------|
| EB680397_at | 5.13228 | CBS / octicosapeptide/Phox/Bemp1 domain-containing protein | EB442616 |
| C8951_at | 5.12786 | autophagy protein 9 | EB680397 |
| C5984_s_at | 5.11211 | Glutathione S-transferase L3 | BP192658 |
| TT31_P06_at | 5.10367 | branchpoint-bridging protein- | EB431211 |
| C2002_at | 5.094 | iron-stimulated ATPase | |
| C8480_at | 5.09189 | | DW000893 |
| C11609_at | 5.08241 | AtNFXL1 | BP530658 |
| DW003019_at | 5.06639 | mitochondria protein-like | |
| BP530858_at | 5.05696 | | DW003019 |
| BP136478_x_at | 5.04525 | | BP530858 |
| BP534009_at | 5.03689 | xanthine dehydrogenase | BP136478 |
| C5130_at | 5.03449 | Myotubularin-like phosphatases II-like protein | BP534009 |
| BP134947_at | 5.01421 | Lon protease-like proteins (| EB440871 |

HYBRIDIZATION 1: DOWN-REGULATED GENES

| Probe Set ID | Fold Change ([0.1-HR] vs [0-HR]) | Blast2GO description | Genbank Accessions |
|---------------|-------------------------------------|--|-----------------------|
| EB446456_s_at | -113.146805 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | EB446456 |
| C1540_at | -112.24273 | Metallocoxy-peptidase inhibitor precursor | DW003768 |
| BP528462_s_at | -106.02285 | | BP528462 |
| EB444844_at | -104.12628 | Non-specific lipid-transfer protein 12 | EB444844 |
| C4518_s_at | -94.435776 | Tts-2 | EB445477 |
| C9569_x_at | -89.39132 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | BP534045 |
| BP532477_s_at | -84.70432 | histone h2b | BP532477 |
| C9569_at | -84.58707 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | BP534045 |

| | | protein | |
|---------------|------------|--|----------|
| TT31_B05_s_at | -64.17848 | Kunitz family trypsin and protease inhibitor protein | |
| C1359_at | -63.72126 | Kunitz family trypsin and protease inhibitor protein | DW004832 |
| C11073_s_at | -51.675232 | histone h2b | AJ632937 |
| | | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | |
| C8359_x_at | -47.944866 | protein | BP532100 |
| C4250_at | -47.925014 | Xyloglucan endotransglucosylase/hydrolase protein 9 | EB447692 |
| T121_at | -44.363083 | Probable peroxidase 61-like | |
| CV020499_at | -43.377075 | Defensin-like protein 1 | CV020499 |
| C3103_at | -40.632347 | Dehydration-responsive protein RD22 | DV158987 |
| C4785_at | -40.391117 | pectinesterase inhibitor | EB443203 |
| EB450715_at | -39.415695 | protease inhibitor seed storage lipid transfer proteinfamily protein | EB450715 |
| EB446455_at | -38.380116 | | EB446455 |
| EB682942_at | -37.366283 | Solanum lycopersicum Hop-interacting protein THI101 | EB682942 |
| C8455_at | -37.23667 | Putative lipid-transfer protein DIR1 | BP530866 |
| C2702_at | -36.52632 | protease inhibitor seed storage lipid transfer proteinfamily protein | DV160970 |
| C9322_at | -35.679733 | peroxidase | D42064 |
| DW002945_at | -35.41532 | thionin-like protein 2-like | DW002945 |
| | | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | |
| C8359_at | -34.82421 | protein | BP532100 |
| C3094_at | -34.49385 | Tts-1 mRNA | DV159040 |
| C4973_at | -34.12534 | Beta-glucosidase 17 | EB441923 |
| C4722_at | -33.92747 | Polyphenol oxidase 5 mRNA | EB443535 |
| C10896_at | -31.665562 | dir1 (defective in induced resistance 1) lipid binding | |
| C3390_at | -31.65741 | thaumatin-like protein | DV157646 |
| | | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | |
| C1179_at | -31.258528 | protein | EB677782 |
| EB447210_at | -31.096302 | | EB447210 |
| C9312_at | -30.419725 | PRP1 precursor (PRP1) | AF154667 |

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|---------------|------------|---|----------|
| BP534122_at | -30.05485 | | BP534122 |
| EB445915_s_at | -29.741653 | | EB445915 |
| DV157701_at | -29.677954 | Hop-interacting protein THI101 | DV157701 |
| EB451377_at | -27.941849 | pectinesterase inhibitor | EB451377 |
| C4427_s_at | -27.392277 | Secretory peroxidase (PER) mRNA | EB446251 |
| C10762_at | -27.151588 | cysteine proteinase inhibitor | |
| EB445248_at | -27.013775 | Ascorbate oxidase-related protein | EB445248 |
| EB683428_at | -26.346548 | | EB683428 |
| C4532_at | -25.846455 | Thionin-like protein 2 | EB445358 |
| C5288_x_at | -24.177057 | phospholipase a2 | EB439873 |
| C10933_x_at | -23.747364 | Organ-specific protein S2-like | EB443218 |
| C1598_at | -23.697481 | resistance 1 protein (DIR1) | DW003388 |
| C768_at | -23.572805 | lipid transfer protein | EB679995 |
| C5288_at | -23.064379 | phospholipase a2 | EB439873 |
| C114_at | -23.02192 | NtMPO1 mRNA for N-methylputrescine oxidase | EB683713 |
| C9040_s_at | -22.968002 | histone h2a | AJ718013 |
| C1341_at | -22.416317 | methylputrescine oxidase (MPO1) | DW004914 |
| C8287_at | -22.385052 | Late embryogenesis abundant (LEA) | BP532844 |
| C8327_s_at | -22.23412 | protease inhibitor seed storage lipid transfer proteinfamily protein | BP532469 |
| C4611_at | -22.19348 | organ-specific protein S2-like | EB444660 |
| C9204_at | -22.178682 | phospholipase a2 | AB190178 |
| BP532655_at | -22.092527 | histone h2b | BP532655 |
| C24_s_at | -22.05233 | SAR8.2e which responds to agents that induce systemic acquired resistance | EB684159 |
| DW002408_at | -20.927486 | acid phosphatase | DW002408 |
| C3209_s_at | -20.707956 | Alpha-xylosidase | DV158466 |
| BP532414_at | -20.638016 | Extensin-like protein | BP532414 |
| C5458_at | -20.589573 | polygalacturonase | EB438772 |
| C6907_at | -20.395523 | lipid binding protein | EB425248 |

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|---------------|------------|--|----------|
| C9763_at | -20.241575 | Pollen Ole e 1 allergen and extensin family protein | EB680840 |
| BP530697_s_at | -20.202066 | Early nodulin-like protein 3 | BP530697 |
| C116_s_at | -20.082241 | acid phosphatase | EB683692 |
| C4788_at | -19.579735 | Polyphenol oxidase mRNA | EB443186 |
| C29_x_at | -19.494299 | SAR8.2e which responds to agents that induce systemic acquired resistance | EB684133 |
| EB439329_at | -19.229498 | SAUR-like auxin-responsive protein | EB439329 |
| C3034_at | -19.167877 | Probable xyloglucan endotransglucosylase/hydrolase protein 5 | DV159267 |
| DV999434_at | -19.122843 | polygalacturonase | DV999434 |
| TT27_L02_s_at | -19.070587 | | |
| EB445696_at | -18.948296 | | EB445696 |
| C8778_s_at | -18.392881 | ABA 8'-hydroxylase CYP707A1 mRNA | CV017759 |
| C7827_at | -18.341425 | Ergosterol biosynthetic protein 28-like | BP130565 |
| C11494_at | -17.975235 | Gibberellin-regulated protein | BP532014 |
| C11348_at | -17.643194 | quinolinate phosphoribosyltransferase1 | CV020323 |
| GC437_at | -17.432434 | | |
| C1890_x_at | -17.199883 | SAR8.2e which responds to agents that induce systemic acquired resistance mRNA | DW001502 |
| EB447351_at | -17.189209 | peroxidase | EB447351 |
| DW002650_at | -17.151072 | sulfate transporter | DW002650 |
| C3800_at | -16.861368 | | EB450211 |
| BP532691_at | -16.571842 | Fasciclin-like arabinogalactan protein 2 | BP532691 |
| C4426_at | -16.531446 | | EB446257 |
| C3609_at | -16.288778 | Xyloglucan endotransglucosylase/hydrolase protein | EB451243 |
| TT33_H24_s_at | -16.174582 | SAUR-like auxin-responsive protein | |
| C10434_at | -16.119675 | | EB448530 |
| TT18_E07_at | -16.049627 | Gibberellin-regulated GASA/GAST/Snakin family protein | |
| C417_x_at | -15.946677 | alpha-tubulin (tubA2 gene) | EB681781 |
| C11223_s_at | -15.835492 | indoleacetic acid-induced-like protein | EB425491 |

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|---------------|------------|---|----------|
| BP130303_at | -15.8008 | LRR receptor-like serine/threonine-protein kinase FLS2 | BP130303 |
| EB679225_at | -15.630405 | polygalacturonase | EB679225 |
| C5074_at | -15.580838 | subtilase family protein | EB441234 |
| C9116_at | -15.354837 | peroxidase | AB044154 |
| EB679741_at | -15.342602 | pectinesterase | EB679741 |
| C426_s_at | -15.32635 | Pollen Ole e 1 allergen and extensin family protein | EB681729 |
| C4686_at | -15.248213 | polygalacturonase | EB443890 |
| C4435_at | -15.195014 | xyloglucan endotransglucosylase/hydrolase protein 15 | EB446175 |
| AJ718952_s_at | -15.163758 | | AJ718952 |
| EB449243_at | -14.982601 | | EB449243 |
| C4154_s_at | -14.822068 | RAB GTPase homolog A5B (RABA5b) | EB448203 |
| TT17_F18_s_at | -14.547446 | Solanum lycopersicum probable galacturonosyltransferase-like 3-like | |
| C3781_at | -14.41395 | dCTP pyrophosphatase 1-like | EB450390 |
| EB439329_s_at | -14.273329 | SAUR-like auxin-responsive protein | EB439329 |
| TT07_C18_at | -14.197915 | ascorbate oxidase-related protein | |
| C6364_at | -14.105858 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin | EB427945 |
| C339_at | -14.013817 | ascorbate oxidase precursor | EB682306 |
| DW005051_at | -13.955565 | disease resistance-responsive family protein | DW005051 |
| TT11_C21_at | -13.849261 | histidine-containing phosphotransfer protein | |
| EB425329_s_at | -13.749264 | Nicotiana alata arabinogalactan protein (Agp4) gene | EB425329 |
| BP135928_s_at | -13.720822 | phospholipase a2 | BP135928 |
| DW001236_at | -13.651784 | | DW001236 |
| C8254_at | -13.618088 | cytochrome p450 CYP82E5v2 | BP533216 |
| C11671_s_at | -13.549463 | GDSL esterase/lipase | BP529892 |
| EB425593_at | -13.422951 | | EB425593 |
| EB681606_at | -13.393274 | arabinogalactan-like protein | EB681606 |
| EB677664_at | -13.379766 | | EB677664 |
| C11213_at | -13.229768 | aquaporin | EB429007 |

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|---------------|-------------|--|----------|
| EB445523_at | -13.191798 | | EB445523 |
| C4790_at | -13.1883955 | RING/U-box superfamily protein | EB443176 |
| C3250_at | -13.186342 | Lipase/lipooxygenase | DV158275 |
| BP132818_at | -13.133838 | glucan endo-1,3-beta-glucosidase-like | BP132818 |
| C8905_at | -13.105773 | aspartyl protease | CN824923 |
| BP530860_at | -13.056808 | DNA-damage-repair/toleration protein DRT100-like | BP530860 |
| CV019731_s_at | -13.012107 | histone h2a | CV019731 |
| C9942_at | -12.830531 | RAB GTPase homolog A5B (RABA5b) | CV018992 |
| C850_at | -12.8194895 | | EB679635 |
| BP531347_at | -12.805303 | qa-sso1 syntaxin1-syp12a-group | BP531347 |
| C4736_at | -12.711536 | thionin-like protein | EB443425 |
| C4598_at | -12.709944 | peroxidase | EB444756 |
| TT39_L01_s_at | -12.663028 | cytochrome p450 ABA 8'-hydroxylase activity | |
| BP530783_at | -12.618227 | DVL5 | BP530783 |
| DW002020_at | -12.59511 | peroxidase | DW002020 |
| BP137042_at | -12.573328 | Probable methyltransferase PMT15 | BP137042 |
| DW002864_s_at | -12.485889 | | DW002864 |
| C3209_at | -12.476377 | Alpha-xylosidase 1 | DV158466 |
| C945_at | -12.47154 | Aquaporin (TIP2;2) | EB679110 |
| C3831_at | -12.4463 | arabinogalactan-like protein | EB450059 |
| C9580_s_at | -12.40486 | Arabinogalactan peptide 22-like | CV021808 |
| BP535097_at | -12.357929 | germin-like protein | BP535097 |
| BP527816_at | -12.348718 | Cyclin-dependent kinase B1-1 | BP527816 |
| C11566_at | -12.223606 | Glycine-rich protein precursor (GRP-CD2) | AB041513 |
| C7827_s_at | -12.173315 | Ergosterol biosynthetic protein 28-like | BP130565 |
| C8716_at | -12.085393 | | CV018702 |
| C850_s_at | -12.07694 | | EB679635 |
| C143_s_at | -12.049506 | Thionin-like protein 2 | EB683582 |

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|---------------|------------|---|----------|
| BP534286_at | -12.026811 | | BP534286 |
| EB450697_x_at | -12.01153 | Xyloglucan endotransglucosylase/hydrolase protein 16 | EB450697 |
| BP530697_at | -11.985638 | Early nodulin-like protein 3 | BP530697 |
| C3756_s_at | -11.972992 | | EB450500 |
| X95932_s_at | -11.931583 | glutamine synthetase | X95932 |
| AY775032_at | -11.884769 | Avr9/Cf-9 rapidly elicited protein 34 | AY775032 |
| C3590_at | -11.852413 | UDP-glucuronate 4-epimerase 6 | EB451340 |
| AJ632865_at | -11.829156 | | AJ632865 |
| DW003611_s_at | -11.822039 | Non-specific lipid-transfer protein 4 | DW003611 |
| C9362_at | -11.781441 | Interactor of constitutive active ROPs 2, chloroplastic | AJ310997 |
| C8936_at | -11.716699 | PRP1 precursor (PRP1) | BQ843040 |
| CV015963_s_at | -11.630792 | Thionin-like protein 2-like | CV015963 |
| DW003786_s_at | -11.618071 | | DW003786 |
| C3601_at | -11.610663 | | EB451278 |
| EB681756_x_at | -11.597239 | | EB681756 |
| TT12_A20_at | -11.595019 | acid phosphatase | |
| TT02_B09_at | -11.575541 | | |
| TT26_I23_s_at | -11.535506 | SAUR-like auxin-responsive protein | |
| TT47_C01_at | -11.319297 | arabinogalactan-like protein | |
| C151_x_at | -11.270437 | Putative PLA2 (F8) mRNA | EB683524 |
| C9435_at | -11.253716 | cyclin d2 | AJ011894 |
| C11178_x_at | -11.251317 | histone h3 | CV020332 |
| TT39_G19_at | -11.224839 | galacturonosyltransferase-like 3-like | |
| C4075_s_at | -11.197329 | L-ascorbate-oxidase | EB448781 |
| C582_at | -11.169133 | C2H2-like zinc finger protein | EB680899 |
| C2370_at | -11.159964 | Bidirectional sugar transporter SWEET11 | DV998925 |
| C3507_at | -11.154376 | Glucomannan 4-beta-mannosyltransferase 2 | EB451763 |
| C4475_at | -10.908224 | | EB445847 |

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|---------------|-------------|---|----------|
| C10007_at | -10.880669 | | DW003475 |
| C10699_at | -10.865577 | beta-glucosidase | |
| C5123_at | -10.84271 | Aldose 1-epimerase | EB440905 |
| BP135923_at | -10.718385 | | BP135923 |
| EB433715_at | -10.7021265 | | EB433715 |
| C8871_at | -10.58252 | | CV016101 |
| EB431781_at | -10.580206 | | EB431781 |
| C10662_at | -10.516152 | Calcium-dependent lipid-binding (CaLB domain) | |
| C9288_at | -10.359008 | SGNH hydrolase-type esterase superfamily protein | AB005878 |
| C5438_at | -10.343335 | Protein SPIRAL1-like 2 | EB438891 |
| C9323_at | -10.325679 | histone h3 | AB032544 |
| C1347_at | -10.27166 | | DW004893 |
| CV019197_s_at | -10.253921 | | CV019197 |
| | | Protease inhibitor/seed storage/lipid transfer protein (LTP) family | |
| C9378_at | -10.16578 | protein | AB041516 |
| BP130906_at | -10.104106 | fruit-specific protein-like | BP130906 |
| C3387_at | -10.0610285 | ribosomal protein l23a | DV157653 |
| EB444699_at | -10.056033 | | EB444699 |
| C9832_at | -10.024544 | cysteine proteinase inhibitor | BP534077 |
| C4140_at | -10.017303 | Aquaporin TIP1-3 | EB448262 |
| C3135_at | -9.9772625 | c-5 sterol desaturase | DV158812 |
| C3996_at | -9.941202 | BURP domain-containing protein | EB449239 |
| C37_s_at | -9.940877 | Aquaporin TIP1-3 | EB684075 |
| EB445463_at | -9.882891 | | EB445463 |
| C3578_at | -9.789772 | UDP-Glycosyltransferase superfamily protein | EB451401 |
| EB444587_at | -9.683923 | apyrase | EB444587 |
| TT07_M15_at | -9.670475 | glycogenin | |
| C10914_at | -9.663568 | | DV160891 |

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|---------------|-----------|---|------------|
| C9631_s_at | -9.663126 | at1g29980 t1p2_9 | EB450805 |
| DW001649_at | -9.651211 | alpha-tubulin | DW001649 |
| C1747_s_at | -9.642854 | Extensin-like protein | DW002402 |
| C7199_at | -9.624616 | L-ascorbate oxidase homolog | BP527758 |
| CV018410_at | -9.62334 | Xyloglucan endotransglycosylase/hydrolase 16 protein | CV018410 |
| DW002621_at | -9.620945 | Heavy metal transport/detoxification superfamily protein | DW002621 |
| EB678910_at | -9.562023 | Transcription factor bHLH93 | EB678910 |
| EB429433_s_at | -9.549725 | | EB429433 |
| C9925_at | -9.51832 | at5g16250 t21h19_170 | DV158606 |
| C5049_at | -9.501816 | Fasciclin-like arabinogalactan protein 17-like | EB441426 |
| EB442025_at | -9.481697 | | EB442025 |
| BP533749_at | -9.440417 | thymidine kinase that salvages DNA precursor | BP533749 |
| C6191_at | -9.393484 | sucrose synthase | EB428780 |
| EB446845_x_at | -9.391231 | SAR8.2e which responds to agents that induce systemic acquired resistance mRNA | EB446845 |
| C9814_at | -9.380004 | Cyclin-D3-1 | DW002211 |
| C11111_at | -9.361719 | GDSL esterase/lipase | DW004277 |
| C9724_at | -9.34831 | glucan endo-1,3-beta-glucosidase 4-like | BP527987 |
| C6096_at | -9.337824 | zinc finger (b-box type) family protein | EB429775 |
| C8938_at | -9.326843 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | BQ843013 |
| TT18_A15_at | -9.316271 | Nicotiana tabacum mRNA for P-rich protein NtEIG-C29 | AB041519.1 |
| CV017834_at | -9.311387 | Putative wound-responsive protein | CV017834 |
| EB439434_x_at | -9.309657 | Bidirectional sugar transporter SWEET11 | EB439434 |
| C5885_s_at | -9.282333 | glutathione s-transferase | EB432255 |
| C426_at | -9.27999 | Pollen Ole e 1 allergen and extensin family protein | EB681729 |
| C1204_at | -9.265655 | | EB677651 |
| DW003765_at | -9.262633 | pectinesterase inhibitor | DW003765 |
| CV020237_at | -9.255445 | | CV020237 |

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|---------------|------------|--|----------|
| EB443226_x_at | -9.248878 | Germin-like protein subfamily 1 member 20 | EB443226 |
| C9878_at | -9.247495 | Cyclin-U2-2 | |
| C4493_at | -9.23484 | Dehydration-responsive protein RD22 | EB445705 |
| EB425788_s_at | -9.217093 | | EB425788 |
| EB446961_at | -9.161382 | Probable protein Pop3 | EB446961 |
| DV159108_at | -9.042607 | triacylglycerol lipase 2-like | DV159108 |
| EB429518_at | -8.983278 | Acyl-CoA N-acyltransferases (NAT) | EB429518 |
| C6195_s_at | -8.981592 | polygalacturonase | EB428764 |
| C1715_at | -8.9782505 | | DW002593 |
| C1333_at | -8.97156 | Non-specific lipid-transfer protein 4 | DW004961 |
| TT36_J19_at | -8.961446 | | |
| C8883_x_at | -8.893642 | NtSN1b mRNA for putative PR-10 type pathogenesis-related protein | CV015950 |
| BP533848_at | -8.891446 | Probable membrane-associated kinase regulator 1 | BP533848 |
| TT29_J14_at | -8.857071 | | |
| DW001649_x_at | -8.783241 | alpha-tubulin | DW001649 |
| C970_at | -8.690408 | thaumatin-like protein | EB678972 |
| EB683546_s_at | -8.679362 | RING-H2 finger protein ATL8 | EB683546 |
| C1057_s_at | -8.668038 | Auxin-responsive protein IAA14 | EB678508 |
| C1567_at | -8.658658 | histone h3 | DW003576 |
| C1757_at | -8.547433 | histone h3 | DW002353 |
| BP528207_at | -8.542712 | Early nodulin-like protein 9 | BP528207 |
| BP533879_at | -8.510333 | gpi-anchored protein | BP533879 |
| C10021_at | -8.504025 | peroxidase | AB044153 |
| EB429987_x_at | -8.499124 | Solanum lycopersicum UDP-glycosyltransferase 73C3-like | EB429987 |
| C2371_s_at | -8.497934 | Bidirectional sugar transporter SWEET11 | DV998924 |
| C5377_at | -8.490543 | Allergen-like protein BRSn20 | EB439226 |
| DW003963_at | -8.441152 | transferase family protein | DW003963 |
| C5711_at | -8.439268 | GMPase mRNA for GDP-D-mannose pyrophosphorylase | EB435299 |

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|---------------|------------|---|----------|
| DW004594_at | -8.42285 | | DW004594 |
| DV999427_at | -8.42003 | calmodulin | DV999427 |
| C1113_at | -8.346464 | thaumatin-like protein | EB678151 |
| C4373_at | -8.268631 | acetylajmalan esterase-like | EB446815 |
| C1616_at | -8.237953 | er lumen protein retaining receptor | DW003244 |
| AY032675_at | -8.193702 | peroxidase | AY032675 |
| C11422_at | -8.166187 | Nicotiana tabacum 10087 gene, promoter region sequence | BP530504 |
| C6521_at | -8.145253 | | EB427221 |
| | | Solanum lycopersicum glucan endo-1,3-beta-glucosidase-like protein 2- | |
| BP532244_at | -8.127633 | like | BP532244 |
| TT34_N22_at | -8.092378 | Arabinogalactan protein 41 | |
| BP192498_at | -8.0897 | L-ascorbate oxidase homolog | BP192498 |
| EB677992_at | -8.076343 | deoxyuridine 5-triphosphate nucleotidohydrolase | EB677992 |
| CN949762_at | -8.015071 | ---NA--- | CN949762 |
| C9325_at | -7.9944124 | heavy-metal-associated domain-containing protein | AB032536 |
| C5085_at | -7.988794 | calcium proton exchanger | EB441141 |
| EB681756_at | -7.9838605 | | EB681756 |
| EB429987_at | -7.9792376 | Solanum lycopersicum UDP-glycosyltransferase 73C3-like | EB429987 |
| C7203_at | -7.9596415 | TBL (TRICHOME BIREFRINGENCE-LIKE) | BP527685 |
| C7027_at | -7.933765 | Transcription factor bHLH25 | AB204829 |
| AB107691_at | -7.928281 | GATA TRANSCRIPTION FACTOR 4, | AB107691 |
| C1757_x_at | -7.914768 | histone h3 | DW002353 |
| | | mrna inducible by salicylic acid or by tmv during systemic acquired | |
| CV019585_x_at | -7.8971457 | resistance | CV019585 |
| C9267_at | -7.890587 | Alpha-expansin precursor (Nt-EXPA5) mRNA | AF049354 |
| C10021_s_at | -7.889969 | peroxidase | AB044153 |
| EB447307_s_at | -7.8781433 | transcription factor bHLH18-like | EB447307 |
| C4598_s_at | -7.865253 | peroxidase | EB444756 |
| DW001779_at | -7.803518 | | DW001779 |

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|---------------|------------|---|----------|
| EB684044_at | -7.7688894 | Probable methyltransferase PMT15 | EB684044 |
| TT13_B19_at | -7.720691 | delta(24)-sterol reductase-like | |
| C10967_at | -7.7108603 | expansin | DW003498 |
| C9428_at | -7.6603856 | Auxin inducible protein | AF123504 |
| C1335_at | -7.627668 | Aquaporin (TIP2;2) | DW004942 |
| TT04_A03_s_at | -7.6039457 | FASCICLIN-like arabinogalactan protein 16 precursor (FLA16) | |
| C5472_at | -7.5606947 | indoleacetic acid-induced-like protein | EB438673 |
| DV162116_at | -7.512391 | galacturonosyltransferase | DV162116 |
| TT07_E06_s_at | -7.496273 | deoxyuridine 5-triphosphate nucleotidohydrolase | |
| C6338_at | -7.4739356 | O-fucosyltransferase family protein | EB428042 |
| BP531865_at | -7.4733424 | | BP531865 |
| DV159900_s_at | -7.431582 | Nucleotide-diphospho-sugar transferases superfamily protein | DV159900 |
| DV158352_at | -7.405432 | aspartyl protease | DV158352 |
| BP133693_at | -7.3747597 | dof zinc finger protein DOF4.6-like | BP133693 |
| C9408_at | -7.3390856 | beta-glucosidase | AB017502 |
| C1663_at | -7.3342915 | MATE efflux family protein | DW002928 |
| C9908_s_at | -7.310454 | ferredoxin | |
| DV160049_at | -7.266537 | | DV160049 |
| BP133191_at | -7.254668 | dof zinc finger protein | BP133191 |
| AJ632831_at | -7.240451 | c-4 sterol methyl oxidase | AJ632831 |
| C9116_s_at | -7.1924725 | peroxidase | AB044154 |
| C9867_at | -7.181048 | histone h4 | CV018874 |
| C9555_at | -7.1605444 | early nodulin-like protein 8 (ENODL8) SAR8.2c which responds to agents that induce systemic acquired | CV020181 |
| DV161065_s_at | -7.1544943 | resistance mRNA | DV161065 |
| EB435374_at | -7.104747 | | EB435374 |
| C4471_s_at | -7.102508 | 24-dehydrocholesterol reductase | EB445882 |
| C1352_s_at | -7.0901875 | Fasciclin-like arabinogalactan protein 17-like | DW004880 |
| BP530474_at | -7.079849 | auxin-induced-like protein | BP530474 |
| C4100_at | -7.026568 | beta-tubulin | EB448532 |

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|---------------|------------|--|----------|
| C3508_at | -6.996239 | MLP-like protein 28 | EB451758 |
| TT06_D13_x_at | -6.992724 | auxin response factor 9 | |
| AJ632831_x_at | -6.96047 | c-4 sterol methyl oxidase | AJ632831 |
| C8991_s_at | -6.94353 | Cyclin-D3-1 | AB243209 |
| TT15_H12_at | -6.9320073 | Ethylene-responsive transcription factor ERF012 | |
| C6207_at | -6.929609 | histone h4 | EB428704 |
| EB445680_s_at | -6.922963 | Solanum lycopersicum probable glutathione S-transferase-like | EB445680 |
| C1903_at | -6.921107 | cytochrome p450 | DW001428 |
| EB682127_x_at | -6.877151 | glycine-rich protein precursor (GRP-CD5) | EB682127 |
| C3264_at | -6.8723817 | monocopper oxidase-like protein SKU5-like | DV158203 |
| C6824_at | -6.858104 | high mobility group protein | EB425661 |
| C1584_at | -6.854959 | NAC domain containing protein 90 (NAC090) | DW003476 |
| C11164_at | -6.850907 | | BQ843215 |
| C9080_at | -6.827601 | cyclin b2 | D50735 |
| C1845_at | -6.8110447 | family 8 glycosyl transferase | DW001746 |
| EB438685_at | -6.8107104 | gpi-anchored protein | EB438685 |
| EB446857_at | -6.791719 | transcription factor bHLH93-like | EB446857 |
| C5338_at | -6.782291 | | EB439501 |
| C2753_s_at | -6.779283 | cyclin-dependent kinase inhibitor 11 | DV160728 |
| BP530115_at | -6.775543 | late embryogenesis abundant lea | BP530115 |
| TT05_G18_s_at | -6.771076 | | |
| CV019680_at | -6.743316 | | CV019680 |
| C9559_at | -6.742571 | heavy-metal-associated domain-containing protein | EB450407 |
| C2681_at | -6.7364707 | cation transmembrane transporter activity, | DV161118 |
| C8124_at | -6.729434 | histone h4 | BP534600 |
| C3109_s_at | -6.719138 | | DV158956 |
| DV160510_at | -6.717403 | | DV160510 |
| C3655_at | -6.7131906 | Cupredoxin superfamily protein | EB451011 |
| C4350_at | -6.70315 | | EB446989 |
| C2877_at | -6.701847 | NKS1 | DV160091 |
| EB445748_at | -6.6749415 | | EB445748 |

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|---------------|------------|--|----------|
| C3904_at | -6.6538815 | protease inhibitor seed storage lipid transfer proteinfamily protein | EB449773 |
| C3697_s_at | -6.650509 | Fasciclin-like arabinogalactan protein 7 | EB450812 |
| EB683711_at | -6.644326 | BAG (Bcl-2-associated athanogene) | EB683711 |
| C4204_x_at | -6.621342 | | EB447919 |
| C10250_at | -6.620617 | methyltransferase PMT3 | DW000015 |
| C3986_at | -6.5743623 | Fasciclin-like arabinogalactan protein 7 heavy-metal-associated domain-containing protein copper chaperone- | EB449306 |
| C4662_at | -6.5638485 | related | EB444180 |
| C3508_x_at | -6.5629025 | MLP-like protein 28 | EB451758 |
| C9867_x_at | -6.559836 | histone h4 | CV018874 |
| EB683068_at | -6.5380692 | | EB683068 |
| GC302_s_at | -6.5350113 | peroxidase 5-like | |
| C8340_at | -6.5246496 | | BP532328 |
| EB447101_at | -6.519783 | lipoygenase | EB447101 |
| C8340_s_at | -6.5197625 | | BP532328 |
| EB681115_at | -6.5178366 | short-chain dehydrogenase/reductase 2b-like | EB681115 |
| EB444513_at | -6.512342 | burp domain-containing protein | EB444513 |
| EB683445_at | -6.5018916 | RIP4 (ROP interactive partner 4) | EB683445 |
| AF211697_at | -6.5015116 | | AF211697 |
| C6571_at | -6.4835825 | pectinacetylerase family protein | EB426850 |
| C842_at | -6.477375 | ferredoxin | EB679662 |
| X97945_at | -6.472271 | dof zinc finger protein | X97945 |
| C9821_at | -6.465331 | | CV017762 |
| C4699_at | -6.463126 | MLP-like protein 28 | EB443803 |
| C11681_s_at | -6.4449534 | peroxidase | |
| CV019211_at | -6.4367747 | patellin-6 | CV019211 |
| C4236_at | -6.376264 | major pollen allergen ole e 1 | EB447745 |
| EB427422_s_at | -6.3758593 | PATATIN-like protein 9 (PLP9) | EB427422 |
| C1816_s_at | -6.343405 | sah7 protein | DW001917 |
| C10967_s_at | -6.323343 | expansin | DW003498 |

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|-------------|------------|---|----------|
| DW004791_at | -6.3185816 | Probable methyltransferase PMT15 | DW004791 |
| AJ632710_at | -6.3091283 | S-acyltransferase 22 | AJ632710 |
| C10139_at | -6.3089447 | | EB444635 |
| C10653_at | -6.3006487 | E3 ubiquitin-protein ligase | EB449998 |
| C9631_at | -6.299152 | at1g29980 t1p2_9 | EB450805 |
| C9649_at | -6.2991247 | | EB449736 |
| C1086_at | -6.2778454 | ARM repeat superfamily protein | EB678291 |
| C10676_at | -6.2711034 | CASP-like protein | EB451239 |
| C3649_at | -6.263081 | lea protein | EB451034 |
| C11128_x_at | -6.262555 | Protein SPIRAL1-like 2 | BP531882 |
| EB679814_at | -6.248381 | | EB679814 |
| CV021518_at | -6.2338796 | | CV021518 |
| C3504_at | -6.222323 | Lipase/lipoxygenase | EB451786 |
| C1743_at | -6.210114 | histone h2b | DW002418 |
| C10662_s_at | -6.1885114 | Calcium-dependent lipid-binding (CaLB domain) family protein | |
| EB683651_at | -6.182399 | purple acid phosphatase | EB683651 |
| C11115_at | -6.152938 | | |
| C10208_at | -6.149126 | | AJ718364 |
| C2825_at | -6.13671 | lactoylglutathione lyase family protein glyoxalase i family protein | DV160370 |
| C7752_s_at | -6.1085877 | aquaporin | BP131810 |
| BP533566_at | -6.07071 | | BP533566 |
| BC4M4353_at | -6.068266 | short-chain dehydrogenase/reductase 2b-like | AJ538739 |
| C2379_at | -6.0596433 | sterol desaturase | DV998891 |
| EB433058_at | -6.048647 | | EB433058 |
| T426_x_at | -6.0474796 | berberine bridge enzyme-like protein | |
| BP534760_at | -6.0458665 | L-ascorbate oxidase | BP534760 |
| EB446291_at | -6.0264587 | | EB446291 |
| C9088_at | -6.0036993 | cytochrome P450 enzyme | DQ131886 |
| EB450909_at | -5.9994383 | | EB450909 |
| C9799_at | -5.918715 | | EB448791 |
| C9175_s_at | -5.909658 | alpha-tubulin | AJ421412 |

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|---------------|------------|---|----------|
| C8810_x_at | -5.8920016 | | CV017149 |
| EB678197_at | -5.889655 | high mobility group protein | EB678197 |
| TT35_D17_s_at | -5.8864784 | legume lectin family protein | |
| C5103_at | -5.8835335 | subtilase family protein | EB441046 |
| TT34_B15_at | -5.873631 | Ntlm1 mRNA for transcription factor LIM | |
| C9740_at | -5.8726664 | plastid-specific ribosomal protein 6 precursor (Psrp-6) | CV017749 |
| TT12_N15_at | -5.854115 | early nodulin-like protein 15 (ENODL15) | |
| BP133374_s_at | -5.852933 | NIM1-INTERACTING 1-like | BP133374 |
| EB449140_at | -5.837351 | calmodulin | EB449140 |
| EB444345_at | -5.8324566 | cytochrome p450 CYP82E5v2 | EB444345 |
| TT15_E21_at | -5.8230114 | Concanavalin A-like lectin protein kinase family protein | |
| C8093_at | -5.786089 | | BP534994 |
| TT05_J08_at | -5.7841883 | | |
| BP535490_s_at | -5.778988 | | BP535490 |
| C1816_at | -5.771439 | sah7 protein | DW001917 |
| CV018410_x_at | -5.7678504 | Xyloglucan endotransglycosylase/hydrolase 16 protein | CV018410 |
| EB681115_s_at | -5.7321916 | short-chain dehydrogenase/reductase 2b-like | EB681115 |
| C889_at | -5.7235284 | heavy-metal-associated domain-containing protein | EB679412 |
| C10056_s_at | -5.7097073 | arabinogalactan-like protein | EB450954 |
| C9469_s_at | -5.7051506 | sterol-C24-methyltransferases involved in sterol biosynthesis | U71108 |
| C7914_at | -5.6722045 | Sec14p-like phosphatidylinositol transfer family protein | BP129196 |
| C9826_at | -5.6699133 | | |
| | | Protease inhibitor/seed storage/lipid transfer protein (LTP) family | |
| C11039_at | -5.6551623 | protein | DV159486 |
| BP531664_at | -5.6468787 | Nuclear transcription factor Y subunit A-10-like | BP531664 |
| C3427_at | -5.6428246 | low temperature and salt responsive protein lti6b | EB452209 |
| C10063_at | -5.634681 | polygalacturonase | EB441834 |
| DW004791_x_at | -5.6291723 | Probable methyltransferase PMT15 | DW004791 |
| EB445330_at | -5.6274405 | | EB445330 |
| C1391_at | -5.623374 | Lipase/lipoxygenase | DW004604 |
| DW001136_at | -5.6053305 | | DW001136 |

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|---------------|------------|--|----------|
| EB684131_at | -5.5759864 | | EB684131 |
| C4815_at | -5.573895 | eburicol 14 alpha-demethylase | EB443002 |
| EB433512_at | -5.5727744 | carboxyl-terminal peptidase-like | EB433512 |
| TT39_L01_at | -5.5727468 | cytochrome p450 ABA 8 ^l -hydroxylase activity | |
| BP134412_at | -5.57195 | ---NA--- | BP134412 |
| CV016014_x_at | -5.5521746 | putative PLA2 (F8) | CV016014 |
| C1571_x_at | -5.5399866 | auxin-repressed protein | DW003556 |
| C10398_x_at | -5.5360675 | histone h4 | EB445430 |
| CV019365_at | -5.5088058 | glycine-rich RNA-binding protein | CV019365 |
| EB437359_x_at | -5.5059934 | auxin-repressed protein | EB437359 |
| C10584_at | -5.4604034 | pectinacetylerase family protein | AY547442 |
| TT06_D13_at | -5.4560184 | auxin response factor 9 | |
| EB450956_at | -5.449393 | | EB450956 |
| C3439_x_at | -5.446726 | | EB452121 |
| EB445250_at | -5.442114 | Ppc1 (Phosphoenolpyruvate carboxylase) | EB445250 |
| C10208_s_at | -5.4302025 | | AJ718364 |
| DW003066_at | -5.4266562 | | DW003066 |
| C3002_at | -5.4263225 | cellulose synthase | DV159432 |
| EB436630_at | -5.41216 | chloroplast lipocalin | EB436630 |
| EB679855_at | -5.410118 | sulfate transporter | EB679855 |
| C9859_at | -5.405445 | Microsatellite A16 sequence | EB449085 |
| EB445209_at | -5.403283 | | EB445209 |
| DV160721_at | -5.3871045 | vacuolar atp synthase 16 kda proteolipid subunit | DV160721 |
| C9498_at | -5.3764963 | coproporphyrinogen oxidase | X82831 |
| C9611_s_at | -5.3759017 | Xyloglucan endotransglucosylase/hydrolase protein 8 | EB451452 |
| TT22_H04_s_at | -5.364645 | RIP4 (ROP interactive partner 4) | |
| C11184_at | -5.3616004 | | EB427694 |
| C10156_at | -5.35146 | RmlC-like cupin-like protein | BP534306 |
| EB444445_at | -5.349628 | purine permease | EB444445 |
| C11689_x_at | -5.348144 | reticuline oxidase-like | |
| C11465_x_at | -5.3383055 | RAB GTPASE A2A | EB448387 |

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|---------------|------------|---|----------|
| BP532889_at | -5.3250375 | | BP532889 |
| C4491_at | -5.314255 | phytochrome-associated protein 2 (PAP2) | EB445717 |
| DW003497_at | -5.3138976 | at1g05070 t7a14_6 | DW003497 |
| BP534778_at | -5.26761 | AUXIN RESPONSE 4-like | BP534778 |
| C9233_at | -5.26215 | potassium channel | AB196791 |
| EB428276_at | -5.249662 | RAB GTPase homolog A4A (RABA4a) | EB428276 |
| C8202_at | -5.215125 | | BP533698 |
| C4179_at | -5.1986814 | COTTON GOLGI-RELATED 3 | EB448035 |
| BP534565_s_at | -5.1973834 | RAN GTPase-activating protein 2 | BP534565 |
| TT20_C23_at | -5.1970415 | DNA-binding protein S1FA-like | |
| C613_s_at | -5.1938844 | chlorophyllase | EB680759 |
| EB683334_at | -5.192282 | KELCH REPEAT F-BOX 1 | EB683334 |
| C4718_at | -5.182404 | TERN mRNA for NAC-domain protein, | EB443598 |
| C9429_at | -5.181896 | c-5 sterol desaturase | AF081794 |
| C2188_at | -5.1804457 | Chaperone DnaJ-domain | DV999877 |
| C3109_at | -5.166153 | | DV158956 |
| EB427657_at | -5.1597304 | transcription factor bHLH79 | EB427657 |
| C11287_at | -5.1401157 | Putative inactive receptor kinase RLK902 | |
| BP535490_at | -5.139987 | | BP535490 |
| TT37_F14_at | -5.1309414 | B-cell receptor-associated 31-like; | |
| EB443226_s_at | -5.1298656 | Germin-like protein subfamily 1 member 20 | EB443226 |
| CV021742_at | -5.1275525 | beta-D-xylosidase 7 | CV021742 |
| C10917_at | -5.118882 | Lipase/lipoxygenase, PLAT | BP132875 |
| BP132676_at | -5.10873 | Avr9/Cf-9 rapidly elicited protein 1 (ACRE1) | BP132676 |
| DV157944_at | -5.1010504 | plastocyanin-like domain-containing protein / putative mavicyanin | DV157944 |
| C7069_s_at | -5.0868926 | Arabidopsis thaliana: arabinogalactan protein 12 | BP529567 |
| EB437359_at | -5.0843897 | auxin-repressed protein | EB437359 |
| CV016642_at | -5.082687 | Kunitz trypsin inhibitor mRNA | CV016642 |
| AB050849_at | -5.0670667 | calmodulin | AB050849 |
| DV160620_at | -5.065706 | wound-induced proteinase inhibitor 2-like | DV160620 |
| TT03_O20_at | -5.055016 | carboxyl-terminal peptidase-like | |

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|---------------|------------|--|----------|
| EB435183_x_at | -5.0499225 | Fasciclin-like arabinogalactan protein 17-like | EB435183 |
| BP533402_at | -5.0448895 | PATATIN-like protein 9 (PLP9) | BP533402 |
| C116_at | -5.0349865 | acid phosphatase | EB683692 |
| EB431642_at | -5.02435 | chlorophyllase 3 | EB431642 |
| C5438_s_at | -5.0099435 | Protein SPIRAL1-like 2 | EB438891 |

HYBRIDIZATION 2: LIST OF UP-REGULATED GENES

| Probe Set ID | Fold Change ([0.1.ACR3] vs [0.ACR3]) | Blast2GO description | Genbank Accessions |
|---------------------|---|--|-------------------------------|
| BT2M444_at | 111.67545 | Serine/threonine-protein phosphatase 7 long form homolog | AJ538927 |
| DV158314_at | 88.955345 | | DV158314 |
| TT20_K20_at | 83.732864 | wound-responsive AP2 like factor 2 | |
| C2925_s_at | 78.67833 | Serine-glyoxylate aminotransferase | DV159853 |
| AJ717881_at | 77.45611 | Nicotiana tabacum mitochondrial DNA | AJ717881 |
| C3356_at | 74.5697 | Late embryogenesis abundant | DV157779 |
| BP527848_at | 70.192894 | cytochrome c biogenesis fc | BP527848 |
| DV159578_at | 68.38409 | Retrotransposon Tnt1 s231d | DV159578 |
| C5960_at | 67.72387 | heat shock protein | EB431431 |
| EB429725_at | 66.90945 | Carbonic anhydrase | EB429725 |
| BP528038_at | 63.692516 | Retroviral-like transposon Tnt 1-94 | BP528038 |
| BP136951_at | 63.308437 | Nicotiana tabacum mitochondrial DNA | BP136951 |
| | | Solanum tuberosum NADH dehydrogenase subunit 1 (nad1) gene, exon | |
| BP135772_at | 63.249794 | e and partial cds; and ATP synthase subunit 6 | BP135772 |
| BP136836_s_at | 62.021793 | Nicotiana tabacum mitochondrial DNA | BP136836 |
| U92011_at | 61.895912 | apocytochrome b (Complejo III) | U92011 |
| EB429701_at | 60.196182 | | EB429701 |
| C4952_at | 59.584114 | proline dehydrogenase | EB442065 |

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|---------------|-----------|---|----------|
| C5842_at | 57.17875 | heat shock protein 90 | EB432766 |
| BP128457_at | 56.293507 | Nicotiana tabacum mitochondrial DNA | BP128457 |
| EB430244_x_at | 55.459404 | | EB430244 |
| C1231_at | 54.69993 | malate synthase | EB677524 |
| EB680720_at | 50.116226 | atpase subunit 8 | EB680720 |
| BP527738_at | 47.822987 | NADH dehydrogenase subunit 5 | BP527738 |
| GC174_at | 46.785896 | Aquaporin TIP3-2-like | |
| BP133164_at | 46.364597 | Nicotiana tabacum mitochondrial DNA | BP133164 |
| C3183_at | 46.072487 | Late embryogenesis abundant protein | DV158564 |
| C5588_at | 44.439526 | 18.1 kDa class I heat shock protein | EB437932 |
| BP130926_at | 44.304398 | Nicotiana tabacum mitochondrial DNA | BP130926 |
| C2925_at | 42.85647 | Serine-glyoxylate aminotransferase | DV159853 |
| BP525606_at | 42.717934 | atpase subunit 9 | BP525606 |
| C11679_at | 40.778374 | nadh dehydrogenase subunit 5 | BP529925 |
| BP526000_at | 40.14674 | Nicotiana tabacum mitochondrial DNA | BP526000 |
| BQ842824_at | 39.410576 | retrotransposon Tto1 | BQ842824 |
| C7616_at | 39.299362 | atpase subunit 6 | BP134217 |
| BP527985_at | 39.107838 | Nicotiana tabacum mitochondrial DNA | BP527985 |
| GC227C_at | 38.896915 | Tobacco mitochondrial ATPase subunit 9 gene | X04019 |
| BP528597_at | 38.749542 | Nicotiana tabacum mitochondrial DNA | BP528597 |
| C7180_at | 38.624332 | cytochrome oxidase subunit i | BP528067 |
| C7375_at | 38.137417 | wall-associated serine threonine kinase | BP525596 |
| BP128412_at | 38.118313 | Nicotiana tabacum mitochondrial DNA | BP128412 |
| C5843_at | 37.955784 | 17.6 kDa class II heat shock protein | EB432749 |
| C855_at | 37.880836 | | EB679601 |
| C11687_at | 36.577847 | galactinol synthase | EB432401 |
| BP137485_at | 36.42345 | retrotransposon Tnt1 | BP137485 |

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| C10869_at | 35.595444 | lea protein | |
| BP529225_at | 35.111065 | Nicotiana tabacum mitochondrial DNA | BP529225 |
| C4145_at | 34.366955 | chlorophyll a-b binding protein 13, chloroplastic-like | EB448243 |
| EB440080_x_at | 34.30311 | RubisCO | EB440080 |
| C6104_at | 34.22965 | | EB429666 |
| C2350_at | 33.925488 | kda heat-shock protein | DV999026 |
| AF211619_at | 33.27704 | | AF211619 |
| TT19_B11_at | 32.966354 | Nicotiana tabacum mitochondrial DNA | |
| C9928_at | 32.35743 | alpha beta hydrolase fold | EB430594 |
| EB447190_at | 31.658949 | Nicotiana tabacum mitochondrial DNA | EB447190 |
| C1241_s_at | 31.395742 | glycine-rich protein / oleosin | EB677486 |
| EB680679_s_at | 31.08091 | atpase subunit 8 | EB680679 |
| BP132686_at | 30.973558 | kunitz trypsin inhibitor | BP132686 |
| C9143_at | 30.8981 | lipoxygenase | X84040 |
| EB426358_x_at | 30.393835 | | EB426358 |
| BC1M4448_s_at | 29.863966 | | AJ538430 |
| DV159109_at | 29.184515 | glycine-rich protein / oleosin | DV159109 |
| X63106_at | 29.07864 | heat shock protein 70 | X63106 |
| C2353_s_at | 28.93972 | Serine-glyoxylate aminotransferase | DV999008 |
| EB429801_s_at | 28.425531 | | EB429802 |
| BP527880_at | 28.056278 | Nicotiana tabacum mitochondrial DNA | BP527880 |
| TT03_E19_at | 27.935764 | | |
| EB430306_s_at | 27.708796 | heat shock protein 82 | EB430306 |
| TT47_C04_at | 27.61207 | lactoylglutathione lyase family protein glyoxalase i family protein | |
| EB438150_at | 27.235348 | at1g32160 f3c3_6 | EB438150 |

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| BP135226_at | 27.030039 | Nicotiana tabacum mitochondrial DNA | BP135226 |
| BP526536_at | 26.89638 | ATP synthase subunit 9 (atp9) | BP526536 |
| CV021716_at | 26.831367 | Cupredoxin | CV021716 |
| CV017694_s_at | | Nicotiana tabacum chloroplast pigment-binding protein CP26 (Lhcb5) | |
| C5985_at | 26.726324 | mRNA | CV017694 |
| TT11_O12_at | 26.641771 | heat shock protein | EB431208 |
| EB683696_s_at | 26.118313 | raffinose synthase protein | |
| BP529621_at | 26.11694 | Acidic leucine-rich nuclear phosphoprotein 32-related protein-like | EB683696 |
| BP525701_at | 25.712324 | Nicotiana tabacum mitochondrial DNA | BP529621 |
| EB430905_at | 25.53987 | Nicotiana tabacum mitochondrial DNA | BP525701 |
| BP132548_at | 25.447958 | | EB430905 |
| EB450398_at | 25.275196 | Nicotiana tabacum mitochondrial DNA | BP132548 |
| BP129383_at | 24.8639 | Proline oxidase/dehydrogenase (didiA15) | EB450398 |
| GC339_at | 24.661766 | Nicotiana tabacum mitochondrial DNA | BP129383 |
| BP134083_at | 24.609312 | Nicotiana tabacum mitochondrial DNA | |
| CV017581_x_at | 24.592886 | Nicotiana tabacum mitochondrial DNA | BP134083 |
| BP531863_at | 24.175251 | Lhcb1*9 gene for light harvesting chlorophyll a/b-binding protein | CV017581 |
| C2074_at | 24.056599 | Phenylalanine ammonia lyase (tpa1) gene | BP531863 |
| C4499_at | 24.032074 | chloroplast small heat shock protein | DW000458 |
| AY775043_at | 23.937628 | glutathione s-transferase | EB445649 |
| C6117_at | 23.926285 | Avr9/Cf-9 rapidly elicited protein 197 (ACRE197) | AY775043 |
| C3170_at | 23.767324 | heat shock protein | EB429529 |
| C979_at | 23.662872 | 17.7 kDa class II heat shock protein | EB682461 |
| AB032546_at | 23.279812 | heat shock protein | EB678931 |
| DW002872_at | 23.177265 | polyubiquitin | AB032546 |
| C2363_at | 23.077877 | Nicotiana tabacum mitochondrial DNA | DW002872 |
| | 22.863512 | Photosystem II light harvesting complex protein 2.1 | DV998975 |

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| C6057_at | 22.728306 | kda class ii heat shock protein | EB430305 |
| BP135070_at | 22.322147 | Nicotiana tabacum mitochondrial DNA | BP135070 |
| C7785_at | 22.132534 | Nicotiana tabacum mitochondrial DNA | BP131298 |
| C10630_at | 21.889254 | beta-amylase | EB680430 |
| BP136364_at | 21.887741 | Nicotiana tabacum mitochondrial DNA | BP136364 |
| C5339_s_at | 21.026598 | FtsH protease (ftsH6) | EB439491 |
| C5973_at | 20.950907 | 17.6 kDa class I heat shock protein 3 | EB431324 |
| EB643481_at | 20.82695 | cytochrome c oxidase subunit iii | EB643481 |
| BP130155_at | 20.651102 | Nicotiana tabacum mitochondrial DNA | BP130155 |
| BP132553_at | 20.50301 | Nicotiana tabacum mitochondrial DNA | BP132553 |
| C2397_s_at | 20.494215 | Chlorophyll a-b binding protein CP26 | DV998784 |
| EB436452_at | 20.426186 | homoserine kinase | EB436452 |
| C955_at | 19.973898 | farnesylated protein | EB679046 |
| C8646_at | 19.878922 | chitinase | CV019934 |
| C11724_at | 19.763012 | DNA repair metallo-beta-lactamase family protein | AJ718369 |
| CN498836_at | 19.317522 | fmo1 (flavin-dependent monooxygenase 1) monooxygenase | CN498836 |
| CV020540_at | 19.066584 | Populus EST from severe drought-stressed leaves | CV020540 |
| C3462_at | 18.964422 | ATP synthase subunit 9, mitochondrial | EB451960 |
| AY150216_at | 18.698704 | Nicotiana tabacum mitochondrial DNA | AY150216 |
| BT1M4115_at | 18.664417 | F-box protein At5g07610-like [Solanum lycopersicum] | AJ538819 |
| C7610_at | 18.512249 | Nicotiana tabacum mitochondrial DNA | BP134269 |
| BP136017_at | 18.437336 | NADH dehydrogenase subunit 5 (nad5) gene lysine-ketoglutarate reductase saccharopine dehydrogenase bifunctional | BP136017 |
| EB445091_at | 18.386955 | enzyme | EB445091 |
| EB437562_at | 18.219975 | | EB437562 |
| C7067_at | 17.929985 | Nicotiana tabacum mitochondrial DNA | BP529585 |
| BP137371_at | 17.8016 | Nicotiana tabacum mitochondrial DNA | BP137371 |
| EB430973_at | 17.611488 | cytochrome c oxidase subunit 1 | EB430973 |

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| DV158065_at | 17.54765 | ribosomal protein l2 | DV158065 |
| EB678365_at | 17.475971 | Chromatin modification-related protein EAF6 | EB678365 |
| EB444453_at | 17.402647 | Nicotine N-demethylase | EB444453 |
| C3684_at | 17.216324 | PLAC8 family protein | EB450858 |
| C8112_at | 17.025969 | | BP534683 |
| BP129948_at | 16.945457 | | BP129948 |
| BP131649_at | 16.928875 | Tobacco mtDNA for ATPase subunit 6 | BP131649 |
| T153_at | 16.905022 | Nicotiana tabacum mitochondrial DNA | |
| C5541_at | 16.896252 | lactoylglutathione lyase family protein glyoxalase i family protein | EB438261 |
| C6142_at | 16.64099 | heat shock protein | EB429144 |
| EB677226_at | 16.44069 | kda oleosin | EB677226 |
| C5436_at | 16.398457 | chlorophyll a/b binding protein mRNA | EB438899 |
| BP130928_at | 16.299953 | Nicotiana tabacum mitochondrial DNA | BP130928 |
| BP530419_at | 16.284676 | WD repeat-containing protein 76-like | BP530419 |
| C6181_at | 15.696813 | em protein | EB428845 |
| DV160238_at | 15.61267 | aldose 1-epimerase | DV160238 |
| C5328_at | 15.610583 | Methyl-CpG-binding domain-containing protein 11 | EB439611 |
| C1463_at | 15.461473 | proline dehydrogenase | DW004233 |
| DW004733_s_at | 15.435001 | Chromatin modification-related protein EAF6 | DW004733 |
| AJ717868_at | 15.395665 | Nicotiana tabacum mitochondrial DNA | AJ717868 |
| C9364_at | 15.362041 | divinyl ether synthase (des1) | AF070976 |
| C7453_at | 15.248449 | ribosomal protein s4 | BP136413 |
| AJ632717_at | 15.221394 | | AJ632717 |
| EB435763_at | 15.177886 | BAG family molecular chaperone regulator 6-like | EB435763 |
| CV019467_x_at | 14.883912 | ribulose--bisphosphate carboxylase oxygenase small subunit | CV019467 |
| C3275_at | 14.746577 | | DV158144 |
| BP130464_at | 14.6703 | Plastocyanin-like domain-containing protein | BP130464 |

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| C4122_at | 14.669683 | galactinol synthase | EB448354 |
| BC4M432_at | 14.54567 | protein transport protein SEC23-like | AJ538733 |
| CV019875_x_at | 14.523414 | | CV019875 |
| EB682553_at | 14.423429 | atp-dependent rna helicase | EB682553 |
| BP129871_at | 14.416701 | | BP129871 |
| TT08_C02_at | 14.215857 | | |
| C8177_at | 14.1653385 | Response to low sulfur 2 | BP534005 |
| TT39_L17_at | 14.049752 | lysine-ketoglutarate reductase saccharopine dehydrogenase bifunctional enzyme | |
| C6033_x_at | 14.047159 | 18.2 kDa class I heat shock protein-like | EB430613 |
| TT21_K10_at | 13.957247 | Ethylene-responsive transcription factor ERF109 | |
| BP132726_at | 13.916099 | alpha,alpha-trehalose-phosphate synthase | BP132726 |
| DV159021_at | 13.88902 | retrotransposonty3-gypsy subclass | DV159021 |
| TT03_O23_at | 13.59603 | aldose 1-epimerase | |
| EB427637_at | 13.388888 | protein-tyrosine-phosphatase PTP1- | EB427637 |
| C8103_at | 13.361235 | Aluminum-activated malate transporter | BP534838 |
| EB427540_at | 13.322374 | DNA repair metallo-beta-lactamase family protein | EB427540 |
| TT16_N05_at | 13.321811 | Desiccation-related protein | |
| BP533822_at | 13.321187 | Drought sensitive 1, DRS 1 | BP533822 |
| CB329254_at | 13.236569 | Nicotiana tabacum mitochondrial DNA | CB329254 |
| C8211_at | 13.214409 | Light harvesting chlorophyll a/b-binding protein | BP533614 |
| EB431233_at | 13.192158 | Cytosolic class I small heat shock protein 3B (sHSP3B) gene | EB431233 |
| BP530824_at | 13.151824 | | BP530824 |
| BP129793_at | 13.068405 | | BP129793 |
| BP132583_x_at | 13.061973 | | BP132583 |
| C3863_at | 12.993561 | glycosyl hydrolase family 36 | EB449916 |
| BP527757_at | 12.418748 | | BP527757 |
| C2898_at | 12.412871 | fructose--bisphosphatase | DV159973 |

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| BP132583_at | 12.375397 | | BP132583 |
| CV016517_at | 12.346965 | | CV016517 |
| DW004672_at | 12.278519 | | DW004672 |
| EB430151_x_at | 12.270774 | RSH-like protein mRNA | EB430151 |
| EB643479_x_at | 12.207405 | proline dehydrogenase | EB643479 |
| CV016003_at | 12.205368 | | CV016003 |
| C5423_x_at | 12.158043 | Chlorophyll a-b binding protein CP26 | EB438962 |
| BP129876_at | 12.136485 | Nicotiana tabacum mitochondrial DNA | BP129876 |
| EB430444_at | 12.132315 | polyubiquitin | EB430444 |
| EB451598_at | 12.108318 | | EB451598 |
| TT10_l10_at | 11.915317 | 18 kDa seed maturation protein-like | |
| CV017513_x_at | 11.853351 | Light-harvesting complex II chlorophyll a/b binding protein | CV017513 |
| CV016587_x_at | 11.850327 | ribulose--bisphosphate carboxylase oxygenase small subunit | CV016587 |
| C2077_at | 11.795908 | aldose reductase | DW000438 |
| BP533429_at | 11.754179 | | BP533429 |
| EB425075_at | 11.631681 | Ethylene-responsive transcription factor ERF110 | EB425075 |
| C506_at | 11.62755 | phosphoadenosine phosphosulfate reductase | EB681340 |
| T160B_s_at | 11.6079645 | Nicotiana tabacum mitochondrial DNA | |
| BP135763_at | 11.57229 | Nicotiana tabacum mitochondrial DNA | BP135763 |
| EB678509_at | 11.541818 | oleosin | EB678509 |
| C6033_at | 11.474501 | 18.2 kDa class I heat shock protein-like | EB430613 |
| DW000655_at | 11.474025 | | DW000655 |
| BP533512_at | 11.472417 | Tumor-related protein | BP533512 |
| C11463_at | 11.430549 | | BP530060 |
| EB431293_at | 11.409429 | had superfamily (subfamily ig)5-nucleotidase | EB431293 |
| BT44M24_at | 11.298419 | | AJ539074 |

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| TT32_K05_at | 11.267681 | | |
| AY061820_at | 11.262658 | asparagine synthetase b | AY061820 |
| C7485_at | 11.118305 | | BP136093 |
| CV018136_s_at | 11.083658 | chlorophyll a b binding protein | CV018136 |
| C11697_at | 11.0790615 | Gag-Pol polyprotein | BQ843094 |
| C2117_x_at | 10.857065 | 1-aminocyclopropane-1-carboxylate oxidase | DW000224 |
| BP134922_at | 10.850565 | Nicotiana tabacum mitochondrial DNA | BP134922 |
| C8194_at | 10.828338 | | BP533757 |
| C772_at | 10.746975 | heat shock protein (TFHS1) | EB679970 |
| BP531956_at | 10.746275 | Nicotiana tabacum putative chloroplast RNA helicase VDL (VDL) gene | BP531956 |
| AJ632753_at | 10.711184 | | AJ632753 |
| C3223_at | 10.684988 | beta-glucosidase | DV158410 |
| CV017513_at | 10.684546 | Light-harvesting complex II chlorophyll a/b binding protein 1 | CV017513 |
| C8747_at | 10.65769 | Chlorophyll a-b binding protein | CV018261 |
| TT33_E11_at | 10.647651 | MscS family inner membrane protein ynaI (MTR_3g100280) | |
| C10550_at | 10.581005 | fructose-bisphosphate aldolase | DV998904 |
| C5590_at | 10.541453 | heat shock protein 90 | EB437835 |
| BP131838_at | 10.511524 | Nicotiana tabacum DNA, presumably centromeric region | BP131838 |
| BP526999_at | 10.467197 | Nicotiana tabacum mitochondrial DNA | BP526999 |
| BP529580_at | 10.436192 | Nicotiana tabacum mitochondrial DNA | BP529580 |
| C5343_at | 10.344674 | thaumatin-like protein | EB439475 |
| C11699_at | 10.337297 | alcohol NADP+ oxidoreductase (drd-1 gene) | AB210296 |
| EB441286_at | 10.326636 | | EB441286 |
| C5984_at | 10.323659 | Glutathione S-transferase L3 | EB431211 |
| C8439_at | 10.288555 | ---NA--- | BP531057 |
| C8873_at | 10.247992 | metallothionein-like protein | CV016087 |
| GC171_at | 10.237384 | Putative hydrolase (C171 gene) | AM851007 |
| C7957_at | 10.169593 | fpa rna binding | BP128668 |

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| EB436466_s_at | 10.132954 | Tetratricopeptide repeat (TPR)-like superfamily protein | EB436466 |
| BP135203_at | 10.130277 | | BP135203 |
| EB430960_x_at | 10.103288 | | EB430960 |
| BP529993_at | 10.096769 | AMSH-like ubiquitin thioesterase 3 | BP529993 |
| BC4M3318_at | 10.0926075 | wall-associated receptor kinase 2-like | AJ538706 |
| C5586_x_at | 10.092258 | photosystem i reaction center subunit ii | EB437940 |
| BP134299_at | 10.033922 | Nicotiana tabacum mitochondrial DNA | BP134299 |
| C5343_x_at | 10.019958 | thaumatin-like protein | EB439475 |
| EB428418_at | 10.016984 | mannosyl (beta--)-glycoprotein beta--n-acetylglucosaminyltransferase | EB428418 |
| TT09_M20_at | 10.015528 | NBS-LRR resistance protein-like protein (Mi-1.7) gene | DQ863286 |
| C10777_at | 9.997732 | | |
| BP528723_at | 9.986232 | Vitis vinifera putative zinc finger protein At1g68190-like | BP528723 |
| EB424731_s_at | 9.716421 | 5-cytosolic ii 5'-nucleotidase | EB424731 |
| EB683696_at | 9.714163 | acidic leucine-rich nuclear phosphoprotein 32-related protein-like | EB683696 |
| TT47_L06_at | 9.594127 | LYR family of Fe/S cluster biogenesis protein | |
| C5269_at | 9.585849 | Expansin-like B1 | EB440002 |
| TT33_K04_at | 9.569608 | Ubiquitin-conjugating enzyme E2 23-like | |
| CV017356_x_at | 9.540375 | ribulose--bisphosphate carboxylase oxygenase small subunit | CV017356 |
| C435_at | 9.514415 | diacylglycerol acyltransferase | EB681692 |
| BP531744_s_at | 9.462854 | Multiprotein-bridging factor 1c | BP531744 |
| C6991_at | 9.443587 | phloem-specific lectin | EB424810 |
| BP131118_at | 9.38625 | Nicotiana tabacum mitochondrial DNA | BP131118 |
| C5813_s_at | 9.371422 | heat shock protein 101 | EB433301 |
| EB426338_at | 9.35851 | | EB426338 |
| EB643469_at | 9.275063 | 60s acidic ribosomal protein p1 | EB643469 |

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| C7650_at | 9.273905 | auxin efflux carrier family protein | BP133741 |
| C9055_at | 9.216777 | 26S proteasome non-ATPase regulatory subunit 1-like | AJ717852 |
| C3666_x_at | 9.208997 | tonoplast malate/fumarate transporter | EB450957 |
| AF211550_at | 9.182844 | | AF211550 |
| TT29_J08_at | 9.113449 | | |
| EB443313_at | 9.020286 | Nicotiana tabacum mitochondrial DNA | EB443313 |
| TT35_A07_at | 9.013661 | | |
| TT25_C13_at | 8.931637 | | |
| C2117_at | 8.855089 | 1-aminocyclopropane-1-carboxylate oxidase DAD1-LIKE LIPASE 1, DALL1, PHOSPHOLIPASE A I BETA 2, PLA- | DW000224 |
| C1432_at | 8.818848 | I{BETA}2 | DW004396 |
| EB446762_at | 8.733766 | | EB446762 |
| TT02_D04_at | 8.732956 | gcn5-related n-acetyltransferase | |
| C9165_at | 8.723312 | heat shock protein 90 | X63195 |
| TT36_C12_at | 8.703842 | phosphoglycerate mutase | |
| BP532514_at | 8.701394 | | BP532514 |
| TT23_K24_at | 8.692692 | UP-9A | |
| BP131163_at | 8.679996 | at5g43400 mwf20_9 | BP131163 |
| C8498_at | 8.679192 | 5-adenylylsulfate reductase | BP530443 |
| C9848_at | 8.647296 | kunitz trypsin inhibitor | EB429016 |
| C3912_s_at | 8.617558 | | EB449715 |
| TT17_K19_at | 8.602243 | gamma aminobutyrate transaminase 1 | |
| C11329_at | 8.552108 | galactinol-sucrose galactosyltransferase 5- | |
| C830_at | 8.544816 | HSP101 | EB679742 |
| C5740_s_at | 8.527613 | beta-amylase | EB434926 |
| C8967_x_at | 8.521924 | Chlorophyll a/b-binding protein (Cab-E) gen | BU673941 |
| BP530384_at | 8.4923525 | mitochondrion | BP530384 |
| C10577_at | 8.477661 | proteinase inhibitor ii | |
| AJ344613_at | 8.462837 | mitochondrial phosphate transporter | AJ344613 |
| C1568_at | 8.455619 | heat shock protein | DW003565 |
| BP531744_at | 8.414473 | Multiprotein-bridging factor 1c | BP531744 |

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| BP526778_at | 8.393721 | Transmembrane magnesium transporter | BP526778 |
| EB441799_at | 8.351606 | | EB441799 |
| C3078_s_at | 8.346041 | | DV159089 |
| CV020902_at | 8.336854 | | CV020902 |
| C11690_at | 8.325079 | | AJ719169 |
| EB433973_at | 8.298513 | PR-10 type pathogenesis-related protein | EB433973 |
| TT15_C12_at | 8.278414 | | |
| BP535422_at | 8.27518 | | BP535422 |
| C3666_at | 8.236498 | anion transporter | EB450957 |
| | | light harvesting chlorophyll a/b-protein complex of Photosystem II (LHC | |
| C5465_s_at | 8.2004385 | II). | EB438710 |
| EB448976_at | 8.181757 | Myosin | EB448976 |
| BP131108_at | 8.1771555 | indole-3-acetic acid-induced protein ARG2-like | BP131108 |
| EB431655_s_at | 8.110686 | phosphatidylcholine transfer protein | EB431655 |
| AF211615_at | 8.07873 | | AF211615 |
| BP132781_at | 8.043887 | | BP132781 |
| C11006_at | 7.989953 | Chaperone DnaJ-domain containing protein 3 | AJ344584 |
| TT40_C12_at | 7.978454 | Galactose oxidase/kelch repeat superfamily protein | BP530000 |
| EB679262_at | 7.9421344 | heat shock protein (HSP17.6II) | EB679262 |
| C3421_at | 7.940885 | FGGY family of carbohydrate kinase | EB643473 |
| EB444268_at | 7.9136176 | putative PAP-specific phosphatase, mitochondrial-like | EB444268 |
| EB424615_at | 7.834969 | EG45-like domain-containing protein 2 | EB424615 |
| EB444653_x_at | 7.825881 | STAY-GREEN 1, chloroplastic-like | EB444653 |
| C2417_at | 7.8112507 | Serine/arginine-rich splicing factor 33 | DV162718 |
| BP531924_at | 7.786214 | Nicotiana tabacum DNA, presumably centromeric region, BAC clone | BP531924 |
| EB427010_at | 7.785891 | UDP-glucose 4-epimerase and UDP-xylose 4-epimerase 1 | EB427010 |
| C3078_at | 7.7527227 | | DV159089 |
| C7594_at | 7.751775 | | BP134549 |
| CV019020_at | 7.7242417 | glutaredoxin | CV019020 |
| EB446762_s_at | 7.6948247 | | EB446762 |

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|---------------|-----------|--|----------|
| at | | | |
| EB682790_at | 7.6940665 | | EB682790 |
| C6489_at | 7.6870866 | coiled-coil domain containing 109a | EB427399 |
| C10856_at | 7.627171 | peptidyl-prolyl cis-trans isomerase FKBP20-2 | EB437088 |
| BP530000_at | 7.6146483 | Galactose oxidase/kelch repeat superfamily protein | BP530000 |
| BP531915_at | 7.6009407 | | BP531915 |
| EB430151_at | 7.576076 | RSH-like protein mRNA | EB430151 |
| C1384_at | 7.501422 | inositol 2-dehydrogenase/D-chiro-inositol 3-dehydrogenase-like | DW004644 |
| EB680493_at | 7.488173 | serine/arginine-rich SC35-like splicing factor SCL33 | EB680493 |
| C792_at | 7.466078 | Regulator of chromosome condensation (RCC1) | EB679895 |
| TT49_J02_at | 7.458919 | | |
| C7871_at | 7.454018 | glycerophosphodiester phosphodiesterase GDE1-like | BP129801 |
| DV160060_at | 7.4303894 | ABA-responsive protein-related | DV160060 |
| C5984_s_at | 7.380546 | Glutathione S-transferase L3 | EB431211 |
| C3039_at | 7.3756604 | | DV159241 |
| TT41_J13_at | 7.3620663 | alkaline alpha-galactosidase seed imbibition protein (SIP) | |
| BP133724_at | 7.2962775 | Nicotiana tabacum mitochondrial DNA | BP133724 |
| C60_s_at | 7.265495 | RING-H2 FINGER A2A | EB683955 |
| EB449731_at | 7.2140493 | 3-hydroxyisobutyrate dehydrogenase | EB449731 |
| BT1M3124_x_at | 7.21035 | | AJ538793 |
| EB436466_at | 7.1937704 | Tetratricopeptide repeat (TPR)-like superfamily protein | EB436466 |
| BT2M345_at | 7.174333 | | AJ538904 |
| BP531076_at | 7.1729484 | arginine decarboxylase 2 (ADC2) | BP531076 |
| BP525580_at | 7.1530414 | Nicotiana tabacum mitochondrial DNA | BP525580 |
| EB679262_x_at | 7.147834 | heat shock protein | EB679262 |
| C5964_at | 7.1462626 | SUN domain-containing protein 2-like | EB431397 |
| C5959_at | 7.139894 | ammonium transporter | EB431432 |
| EB431281_at | 7.131035 | | EB431281 |
| C5953_s_at | 7.1251945 | Heat shock protein 70 (HSP70) | EB431543 |
| C10330_at | 7.0835714 | ribosomal-protein S6 kinase | |

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|---------------|-----------|---|----------|
| BC1M2232_at | 7.0472097 | Nicotiana tabacum putative virus-specific-signaling-pathway regulated | AJ538396 |
| C1971_at | 7.010709 | protein mRNA | DW001020 |
| BP531915_x_at | 7.0083075 | | BP531915 |
| DW001791_at | 6.9663014 | Avr9/Cf-9 rapidly elicited protein 284 (ACRE284) | DW001791 |
| TT14_A22_at | 6.946241 | chloroplast omega-6 fatty acid desaturase | |
| MC207B_x_at | 6.945107 | heat shock protein 70 | |
| EB433527_x_at | 6.9433823 | protein LOL2-like | EB433527 |
| C9254_at | 6.9349203 | Avr9/Cf-9 rapidly elicited protein 284 (ACRE284) | AY220484 |
| TT36_A01_at | 6.9016476 | Plastidic SufC-like ATP-binding cassette/ATPase | |
| CV020327_at | 6.901536 | | CV020327 |
| C8736_at | 6.867241 | Chlorophyll a/b binding protein | CV018370 |
| C1014_at | 6.858704 | Glycoprotein membrane precursor GPI-anchored | EB678737 |
| DV159331_at | 6.856231 | alkaline alpha-galactosidase seed imbibition protein (SIP) | DV159331 |
| DV999608_at | 6.832396 | | DV999608 |
| CV020764_at | 6.820785 | | CV020764 |
| C10839_at | 6.8100567 | MEMBRANE TRYPTOPHAN-RICH SENSORY PROTEIN | EB677368 |
| C11609_at | 6.7604628 | AtNFXL1 | |
| BT1M3124_at | 6.746027 | | AJ538793 |
| EB447050_at | 6.7415814 | Nicotiana tabacum mitochondrial DNA | EB447050 |
| C5953_at | 6.725434 | Heat shock protein 70 (HSP70) | EB431543 |
| TT10_K08_s_at | 6.724875 | Ethylene-responsive transcription factor ERF110 | |
| AY554170_at | 6.713956 | RAFFINOSE SYNTHASE | AY554170 |
| DW004941_at | 6.700755 | glycosyl hydrolase family 36. | DW004941 |
| EB679258_at | 6.6919765 | Cystathionine beta-synthase (CBS) | EB679258 |
| C9254_s_at | 6.668064 | Avr9/Cf-9 rapidly elicited protein 284 (ACRE284) | AY220484 |
| C7922_at | 6.620568 | | BP129030 |
| C5423_at | 6.6104484 | Chlorophyll a-b binding protein CP26 | EB438962 |
| BP534314_at | 6.5852785 | retrotransposonty3-gypsy subclass | BP534314 |

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|---------------|-----------|--|----------|
| AJ717975_at | 6.5733595 | inactive poly [ADP-ribose] polymerase SRO4 | AJ717975 |
| BP534042_at | 6.5550323 | | BP534042 |
| C7575_at | 6.546349 | BAG family molecular chaperone regulator 6 | BP134712 |
| BP529718_at | 6.536426 | protein SMG7-like | BP529718 |
| EB438344_at | 6.529522 | polyubiquitin | EB438344 |
| CV017545_x_at | 6.5161734 | cytochrome b6f complex subunit | CV017545 |
| EB433304_at | 6.5045547 | DEAD-box ATP-dependent RNA helicase 35 | EB433304 |
| AF129003_at | 6.497693 | diacylglycerol acyltransferase | AF129003 |
| C6098_at | 6.481185 | pirin domain protein | EB429765 |
| BP137193_at | 6.4282565 | | BP137193 |
| DV999481_at | 6.3954644 | Phospholipase A2 family protein | DV999481 |
| C8982_at | 6.395288 | P-loop containing nucleoside triphosphate hydrolases | AF211627 |
| BP129878_at | 6.3930087 | Nicotiana tabacum mitochondrial DNA | BP129878 |
| C11187_at | 6.387875 | protein kinase family protein peroxisomal protein involved in the activation of fatty acids through | BP132993 |
| DV160965_at | 6.3815084 | esterification with CoA. | DV160965 |
| DV161958_at | 6.3796873 | ARM repeat superfamily protein | DV161958 |
| BP136478_x_at | 6.3642364 | | BP136478 |
| C6137_at | 6.363316 | heat shock protein 90 | EB429210 |
| DV160812_at | 6.3555884 | DNAJ heat shock protein-like protein | DV160812 |
| C393_at | 6.334662 | glutathione s-transferase | EB681909 |
| C8982_x_at | 6.3173685 | P-loop containing nucleoside triphosphate hydrolases | AF211627 |
| C6_s_at | 6.314144 | aaa-type atpase family protein | EB684250 |
| C6120_s_at | 6.282467 | cytochrome b6f complex subunit | EB429486 |
| TT31_A15_at | 6.270895 | Cystathionine beta-synthase | |
| BP130283_at | 6.2686696 | Nicotiana tabacum mitochondrial DNA | BP130283 |
| EB445138_at | 6.2623076 | | EB445138 |
| EB682912_at | 6.2502723 | ABC transporter | EB682912 |
| C5973_s_at | 6.248546 | 17.6 kDa class I heat shock protein 3 | EB431324 |
| DW005018_at | 6.235227 | cell differentiation protein | DW005018 |

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|---------------|-----------|--|----------|
| DV161606_at | 6.2203984 | | DV161606 |
| BP136478_at | 6.2114997 | | BP136478 |
| C10717_at | 6.175004 | bap2 (bon association protein 2) | |
| TT31_B21_at | 6.1579113 | | |
| C8110_at | 6.1576905 | FACT complex subunit SPT16 | BP534697 |
| C9178_at | 6.15535 | chaperone protein | AJ299254 |
| C3083_at | 6.1282926 | tuftelin interacting protein 11 | DV159070 |
| BP129305_at | 6.122045 | Apis mellifera vacuolar H[+] ATPase 44kD C subunit (Vha44), | BP129305 |
| C5847_at | 6.0966015 | | EB432672 |
| TT06_D09_at | 6.0800395 | BRZ-INSENSITIVE-PALE GREEN 3 | |
| C11038_x_at | 6.070125 | Nicotiana tabacum UP-9A mRNA | EB445189 |
| BP535324_at | 6.0549927 | Mitochondrial carrier protein MTM1 | BP535324 |
| EB428741_at | 6.038856 | Nicotiana tabacum mitochondrial DNA | EB428741 |
| C1384_s_at | 6.0359735 | inositol 2-dehydrogenase/D-chiro-inositol 3-dehydrogenase-like | DW004644 |
| BP136709_at | 6.0314555 | fggy-family pentulose kinase | BP136709 |
| C5567_at | 6.012526 | alpha-amylase | EB438092 |
| EB440986_at | 6.0035124 | 1,4-dihydroxy-2-naphthoate polyprenyltransferase | EB440986 |
| C6059_s_at | 5.9688396 | chaperone protein ClpB3 | EB430277 |
| C7273_s_at | 5.9151616 | nuclear transcription factor Y subunit A-9-like | BP526733 |
| EB432339_at | 5.907716 | atp-dependent chaperone | EB432339 |
| C7998_at | 5.8787575 | ALUMINUM SENSITIVE 3 | BP128380 |
| DW000729_at | 5.8738184 | 4-hydroxyphenylpyruvate dioxygenase | DW000729 |
| C2051_at | 5.873556 | 4-hydroxyphenylpyruvate dioxygenase | DW000597 |
| C9493_x_at | 5.872241 | psi-h precursor | X61665 |
| TT23_L21_at | 5.859572 | Concanavalin A-like lectin protein kinase family protein | |
| C4104_at | 5.840105 | sugar transporter | EB448481 |
| BP535164_at | 5.825795 | glutathione s-transferase | BP535164 |
| EB682437_at | 5.8188934 | probable Xaa-Pro aminopeptidase P-like | EB682437 |
| DV999563_s_at | 5.8162723 | sucrose accumulator | DV999563 |
| BP535224_at | 5.8105044 | CTP synthase-like | BP535224 |

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|---------------|-----------|--|----------|
| EB429951_at | 5.7962017 | monoglyceride lipase | EB429951 |
| BP130441_at | 5.7924147 | | BP130441 |
| EB680544_at | 5.7807794 | ABC1-like kinase that regulates vitamin E metabolism. | EB680544 |
| BP530887_at | 5.762943 | | BP530887 |
| CN824887_at | 5.7564917 | 4-coumarate--CoA ligase-like 1 | CN824887 |
| TT31_K18_at | 5.741824 | mrp-like abc transporter | |
| C10145_at | 5.7239275 | | |
| EB431374_at | 5.720411 | peroxisome biogenesis factor 10-like | EB431374 |
| C6137_x_at | 5.7166495 | heat shock protein 90 | EB429210 |
| EB426287_at | 5.714991 | ATJ8 | EB426287 |
| EB680776_at | 5.7100735 | telomere binding protein tbp1 | EB680776 |
| C2303_at | 5.7006474 | | DV999288 |
| DW001208_at | 5.691578 | | DW001208 |
| EB425502_at | 5.6846914 | curculin-like (mannose-binding) | EB425502 |
| C351_at | 5.6819882 | udp-glucose 4-epimerase | EB682214 |
| BP533267_at | 5.636418 | zinc finger protein CONSTANS-LIKE 10-like | BP533267 |
| CV021526_at | 5.620142 | auxin-induced protein 6B-like | CV021526 |
| TT09_K08_at | 5.613441 | aldose 1-epimerase | |
| C6090_at | 5.605439 | methionine gamma-lyase | EB429856 |
| EB428150_at | 5.600337 | 4-hydroxyphenylpyruvate dioxygenase (vitE) | EB428150 |
| CV019915_x_at | 5.5873313 | ribulose--bisphosphate carboxylase oxygenase small subunit | CV019915 |
| TT01_D03_at | 5.57302 | leucine zipper class I (HD-Zip I) protein | |
| BP526035_at | 5.566104 | zinc finger transcription factor zfp19 | BP526035 |
| EB433720_at | 5.564657 | transcription factor import into nucleus | EB433720 |
| EB435348_s_at | 5.5488477 | | EB435348 |
| EB436648_at | 5.5243063 | | EB436648 |
| EB426811_at | 5.5205374 | wd-40 repeat family protein | EB426811 |
| BP134312_at | 5.5196304 | vacuolar-type ca2+- | BP134312 |
| C11035_at | 5.5132217 | nitric oxide synthase interacting protein | BP129459 |
| BC2M1333_at | 5.511622 | lysophospholipase-like protein | AJ538460 |
| BP130591_at | 5.5077796 | Nicotiana tabacum mitochondrial DNA | BP130591 |

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|---------------|-----------|--|----------|
| EB432538_at | 5.5070834 | | EB432538 |
| C8120_at | 5.490507 | Zinc finger AN1 domain-containing stress-associated protein 12 | BP534647 |
| BP533468_at | 5.481088 | trichome birefringence-like 12 | BP533468 |
| BP527234_at | 5.4592285 | UV-stimulated scaffold protein A | BP527234 |
| TT40_B19_at | 5.452707 | Major facilitator superfamily protein | |
| BP527547_at | 5.447004 | ribonuclease | BP527547 |
| BP528301_at | 5.425247 | E3 ubiquitin-protein ligase MARCH3-like | BP528301 |
| C9701_at | 5.4162254 | ---NA--- | |
| C1339_at | 5.40109 | heat shock protein 70 | DW004921 |
| C11016_at | 5.39445 | elongation factor 1 homolog | |
| BP131621_at | 5.380234 | ran guanine nucleotide release factor | BP131621 |
| EB437163_at | 5.3709636 | Acyl transferase/acyl hydrolase/lysophospholipase superfamily protein; | EB437163 |
| C5936_s_at | 5.367227 | heat shock protein | EB431779 |
| EB441710_s_at | 5.3602705 | | EB441710 |
| C10272_at | 5.3426766 | DEAD-box ATP-dependent RNA helicase 3 | BP532820 |
| AY553220_s_at | 5.3242984 | hexokinase | AY553220 |
| CV019185_s_at | 5.310594 | ---NA--- | CV019185 |
| BP136313_at | 5.309528 | auxin-responsive family protein | BP136313 |
| EB444451_at | 5.3060837 | BSD domain-containing protein 1-like | EB444451 |
| EB438663_at | 5.294544 | mitochondrial dicarboxylate carriers (DIC) | EB438663 |
| C6641_at | 5.2837944 | neutral invertase-like protein | EB426499 |
| DV159113_at | 5.2747283 | | DV159113 |
| C7400_x_at | 5.2725005 | aldose 1-epimerase | BP137205 |
| C1904_at | 5.2625036 | ammonium transporter | DW001426 |
| BP531161_at | 5.2620287 | actin | BP531161 |
| TT24_P17_at | 5.2584176 | 6-phosphogluconate dehydrogenase | |
| BP131998_at | 5.2304688 | Nicotiana tabacum mitochondrial DNA | BP131998 |
| EB427025_at | 5.2271204 | FAR-RED ELONGATED HYPOCOTYL 3 | EB427025 |
| TT36_I22_at | 5.213813 | DWD HYPERSENSITIVE TO UV-B 1 | |

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|---------------|-----------|---|----------|
| C6498_at | 5.209885 | Nicotiana tabacum mitochondrial DNA | EB427327 |
| CV020538_x_at | | | |
| C2292_at | 5.2047415 | metallothionein-like protein type 2 | CV020538 |
| C6006_at | 5.1991186 | s-phase kinase-associated protein 1a | DV999342 |
| DW001352_at | 5.1923866 | sulfonate biosynthesis | EB430956 |
| DV160534_s_at | 5.192232 | mbd02 (methyl--binding domain 2) dna binding | DW001352 |
| CV016039_at | 5.1553907 | | DV160534 |
| CV018348_x_at | 5.153621 | nitric oxide synthase-interacting protein | CV016039 |
| C5037_at | 5.152184 | cation transport regulator-like protein 2 | CV018348 |
| BP534542_at | 5.149356 | catalase | EB441492 |
| C10962_at | 5.1365604 | | BP534542 |
| TT07_J13_x_at | 5.1223016 | aldose 1-epimerase | |
| EB436530_at | 5.1163535 | zinc finger protein | |
| C899_at | 5.1156254 | | EB436530 |
| BP526155_at | 5.113641 | heat shock protein 70 | EB679372 |
| TT25_L17_at | 5.106665 | msl2 (mscs-like 2) | BP526155 |
| C7012_at | 5.10203 | translation initiation factor if-2 subunit gamma | |
| EB451952_at | 5.0988684 | clavamate synthase-like | EB424674 |
| BC3M3466_at | 5.0985684 | mitochondrial adenine nucleotide transporter ADNT1 | EB451952 |
| TT07_N11_at | 5.0940633 | | AJ538606 |
| EB680189_s_at | 5.08709 | ABC1-like kinase that regulates vitamin E metabolism. | |
| BP133732_s_at | 5.0836487 | anion transporter | EB680189 |
| C2894_at | 5.07296 | mitochondrial dicarboxylate carrier protein | BP133732 |
| BP530329_at | 5.0438633 | | DV160003 |
| C5740_at | 5.0394826 | galactokinase like protein | BP530329 |
| C3129_at | 5.039329 | beta-amylase | EB434926 |
| EB451987_at | 5.0359535 | histone h2b | DV158840 |
| C8228_at | 5.033186 | inositol monophosphatase | EB451987 |
| | 5.029397 | adp atp translocase | BP533465 |

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|-------------|-----------|-----------------------|----------|
| C8981_at | 5.016784 | atg11050-like protein | AF211666 |
| C9515_x_at | 5.011718 | lipase family protein | AJ310476 |
| EB442037_at | 5.01128 | | EB442037 |
| C6002_at | 5.004736 | chaperone protein | EB430968 |
| C9515_at | 5.0026073 | lipase family protein | AJ310476 |

HYBRIDIZATION 2: LIST OF DOWN-REGULATED GENES

| Probe Set ID | Fold Change ([0.1-ACR3] vs [0-ACR3]) | Blast2GO description | Genbank Accessions |
|---------------|---|--|-----------------------|
| EB428960_at | -80.616325 | Polygalacturonase | EB428960 |
| EB446486_at | -51.34174 | Peroxidase | EB446486 |
| EB449841_s_at | -45.957146 | Leucine-rich repeat-containing protein | EB449841 |
| BP534370_s_at | -38.67988 | pectinesterase Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | BP534370 |
| C9206_s_at | -38.6504 | protein | AY554167 |
| EB425358_at | -29.108345 | Polygalacturonase inhibitor protein | EB425358 |
| EB440553_s_at | -27.161032 | Pectin methylesterase | EB440553 |
| AW351426_at | -22.96543 | Pectinesterase | AW351426 |
| C8682_s_at | -22.638622 | protease inhibitor seed storage lipid transfer proteinfamily protein | CV019177 |
| C4939_at | -22.31663 | Leucine-rich repeat-containing protein | EB442159 |
| DV161336_s_at | -20.52493 | pectinacetylerase family protein | DV161336 |
| C6791_at | -20.387045 | TM6 (TM6) mRNA | EB425830 |
| C3503_at | -19.185617 | IgA FC receptor-like Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | EB451787 |
| C9459_x_at | -18.369795 | protein | AF043555 |
| C8384_s_at | -18.141178 | | BP531819 |
| BP135928_s_at | -17.656239 | phospholipase a2 | BP135928 |
| DW002945_at | -17.50807 | Thionin-like protein 2-like | DW002945 |
| BP192498_at | -17.260117 | L-ascorbate oxidase | BP192498 |

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| | | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | |
| C9459_at | -16.892176 | protein | AF043555 |
| C4154_s_at | -15.969009 | RAB GTPase homolog A5B (RABA5b) | EB448203 |
| C10762_s_at | -15.948369 | cysteine proteinase inhibitor | |
| EB679225_at | -15.662741 | Polygalacturonase | EB679225 |
| EB425329_s_at | -15.618789 | Arabinogalactan protein (Agp4) gene | EB425329 |
| EB441275_at | -15.24011 | cytochrome p450, ABA 8'-hydroxylase activity | EB441275 |
| EB679741_at | -15.162342 | pectinesterase | EB679741 |
| AW351425_s_at | -14.998402 | 41 kd chloroplast nucleoid dna binding protein | AW351425 |
| BP533582_at | -14.77119 | aspartyl protease | BP533582 |
| TT14_E01_at | -14.690251 | peroxidase | |
| C4996_at | -14.652234 | Fasciclin-like arabinogalactan protein 17 | EB441804 |
| TT39_L01_s_at | -14.562316 | cytochrome p450, ABA 8'-hydroxylase activity | |
| EB439923_at | -14.525838 | Nicotiana tabacum Sar8.2c gene | EB439923 |
| EB448446_s_at | -14.332018 | xyloglucan endotransglucosylase/hydrolase protein 21 | EB448446 |
| DV161056_at | -14.319736 | aspartyl protease | DV161056 |
| C1347_at | -14.24198 | | DW004893 |
| C3103_at | -14.159129 | Dehydration-responsive protein RD22 mediated by ABA | DV158987 |
| C4518_s_at | -13.878622 | Tts-2 | EB445477 |
| BP534122_x_at | -13.806412 | | BP534122 |
| C4608_x_at | -13.71098 | pathogenesis-related protein 1 | EB444675 |
| TT18_E07_at | -13.376223 | Gibberellin-regulated GASA/GAST/Snakin family protein | |
| EB424775_at | -13.316277 | beta-glucosidase | EB424775 |
| C1598_at | -13.295332 | induced resistance 1 protein (DIR1) | DW003388 |
| EB450715_at | -13.188036 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein | EB450715 |
| AF030071_at | -12.958549 | Small auxin-up protein 81 mRNA, | AF030071 |
| C11401_at | -12.922505 | SAUR-like auxin-responsive protein | DW002050 |
| EB443961_at | -12.909127 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein | EB443961 |

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|---------------|------------|--|----------|
| EB445802_s_at | -12.815578 | serine/threonine-protein phosphatase 6 regulatory subunit 3-like | EB445802 |
| C284_at | -12.783947 | pectinesterase | EB682699 |
| GC437_at | -12.783812 | | |
| C270_s_at | -12.588543 | Sar8.2c gen | EB682802 |
| C3748_at | -12.569407 | O-methyltransferase-like protein | EB450534 |
| C6342_at | -12.535174 | C2H2-type zinc finger family protein | EB428022 |
| C11498_at | -12.479123 | expansin | AF049351 |
| C9778_s_at | -12.264188 | fasciclin-like arabinogalactan-protein 1 (Fla1) | EB441790 |
| C9611_s_at | -12.204412 | Xyloglucan endotransglucosylase/hydrolase protein 8 | EB451452 |
| C8173_at | -12.197726 | ethylene response factor 1 | BP534034 |
| DW002020_at | -12.083499 | peroxidase | DW002020 |
| DV159108_s_at | -12.041872 | Triacylglycerol lipase 2 | DV159108 |
| EB680694_at | -11.968442 | bidirectional sugar transporter SWEET11-like [Solanum lycopersicum] Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin | EB680694 |
| BP526677_at | -11.905332 | superfamily protein | BP526677 |
| EB440907_s_at | -11.766182 | | EB440907 |
| C1179_at | -11.55473 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein | EB677782 |
| EB444762_at | -11.532636 | protein GLUTAMINE DUMPER 2-like | EB444762 |
| C10699_at | -11.467931 | beta-glucosidase | |
| C5074_at | -11.328968 | subtilase family protein | EB441234 |
| C4435_at | -11.325342 | Xyloglucan endotransglucosylase/hydrolase protein 8 | EB446175 |
| C311_at | -11.207093 | UDP-D-glucuronate 4-epimerase | EB682528 |
| C9942_at | -11.118212 | RAB GTPase homolog A5B (RABA5b); | CV018992 |
| C11015_x_at | -11.080911 | Xyloglucan endotransglucosylase/hydrolase protein 8 | BP532291 |
| C9183_s_at | -11.036268 | pectinesterase | AJ249786 |
| C1352_s_at | -10.921543 | Fasciclin-like arabinogalactan protein 17 | DW004880 |
| EB448680_at | -10.814861 | Xyloglucan endotransglucosylase/hydrolase protein 16 | EB448680 |
| TT19_B08_s_at | -10.6448 | CASP-like protein At4g25830 | |

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| C1656_at | -10.625915 | Protein trichome birefringence-like 19 | DW002965 |
| C7203_at | -10.413381 | TBL (TRICHOME BIREFRINGENCE-LIKE) | BP527685 |
| BP128824_s_at | -10.388391 | sucrose synthase | BP128824 |
| C5458_at | -10.344129 | Polygalacturonase 2 (PG2) | EB438772 |
| T121_at | -10.28782 | | |
| | | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | |
| C9569_at | -10.246339 | protein | BP534045 |
| BP534336_at | -10.227989 | probable peroxidase 61-like | BP534336 |
| | | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | |
| C9206_at | -10.1952505 | protein | AY554167 |
| BP531572_at | -10.015309 | Polygalacturonase inhibitor 2 | BP531572 |
| EB679610_at | -9.942466 | defensin protein | EB679610 |
| C1715_at | -9.891613 | | DW002593 |
| EB450697_x_at | -9.884681 | Probable xyloglucan endotransglucosylase/hydrolase protein 16 | EB450697 |
| C11111_at | -9.817467 | GDSL esterase/lipase | DW004277 |
| EB683428_at | -9.792301 | | EB683428 |
| C8778_s_at | -9.7802925 | Solanum tuberosum ABA 8'-hydroxylase CYP707A1 mRNA | CV017759 |
| EB439329_s_at | -9.749628 | SAUR-like auxin-responsive protein | EB439329 |
| C5041_at | -9.625612 | UDP-D-glucuronate 4-epimerase | EB441463 |
| EB448680_x_at | -9.604016 | xyloglucan endotransglucosylase/hydrolase | EB448680 |
| DV162188_x_at | -9.590505 | Sar8.2c gene | DV162188 |
| BP534353_x_at | -9.540515 | tumor-related protein | BP534353 |
| C10916_at | -9.479369 | | EB434843 |
| EB445915_s_at | -9.444447 | | EB445915 |
| C4250_at | -9.382029 | Xyloglucan endotransglucosylase/hydrolase protein 9 | EB447692 |
| C7199_at | -9.313581 | L-ascorbate oxidase/laccase | BP527758 |
| BP192650_at | -9.224618 | L-ascorbate oxidase/laccase | BP192650 |
| C3442_at | -9.189084 | Methylesterase PCR A (PMEPCRA) | EB452110 |
| C29_x_at | -9.131357 | Sar8.2c gene | EB684133 |

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| C8327_s_at | -9.106024 | protease inhibitor seed storage lipid transfer proteinfamily protein | BP532469 |
| DW002650_at | -9.059701 | sulfate transporter | DW002650 |
| C1843_at | -9.019983 | Extensin-like protein | DW001775 |
| CV021685_at | -9.019173 | notum homolog | CV021685 |
| C1072_at | -8.931874 | subtilase family protein | EB678376 |
| CN949762_at | -8.924752 | | CN949762 |
| AJ632879_at | -8.920886 | protein kinase | AJ632879 |
| C10933_at | -8.912978 | organ-specific protein S2 | EB443218 |
| DV161969_at | -8.903852 | | DV161969 |
| C8383_at | -8.800708 | protein Brevis radix-like 4-like | BP531829 |
| EB681684_at | -8.76154 | Abl interactor-like protein 2 | EB681684 |
| BP530762_at | -8.761454 | alpha-glucosidase | BP530762 |
| BP533108_s_at | -8.692798 | | BP533108 |
| C4175_at | -8.674912 | Xyloglucan endotransglucosylase/hydrolase protein 9 | EB448056 |
| C10933_x_at | -8.661937 | Isoflavone synthase 2 (IFS2) gene | EB443218 |
| C6571_at | -8.605525 | Pectinacetylerase family protein | EB426850 |
| C4606_at | -8.534719 | pathogenesis-related protein | EB444694 |
| C1115_at | -8.534699 | Alpha-amylase | EB678139 |
| C8275_at | -8.526793 | | BP532978 |
| TT10_l19_s_at | -8.51718 | ABA 8'-hydroxylase CYP707A1 | |
| EB439329_at | -8.5168295 | SAUR-like auxin-responsive protein | EB439329 |
| C9312_s_at | -8.505115 | proline-rich protein (HyPRP1) gene | AF154667 |
| C4258_at | -8.41406 | TBL (TRICHOME BIREFRINGENCE-LIKE) | EB447642 |
| C6364_x_at | -8.380783 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin | EB427945 |
| TT27_L02_s_at | -8.363998 | autophagy 18G-like protein mRNA | |
| C9312_at | -8.351018 | hybrid proline-rich protein (HyPRP1) gene | AF154667 |
| C4592_x_at | -8.259797 | | EB444810 |
| BP135923_at | -8.231058 | | BP135923 |
| CV019197_s_at | -8.202261 | | CV019197 |

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| EB432644_s_at | -8.183935 | wrky transcription factor 6 | EB432644 |
| C1890_x_at | -8.05885 | Sar8.2c gene | DW001502 |
| C4686_at | -8.034712 | polygalacturonase | EB443890 |
| EB451377_at | -8.0298 | Polygalacturonase-like | EB451377 |
| TT26_L01_at | -8.016976 | pectinesterase inhibitor | |
| C3884_s_at | -7.934937 | Luminal binding protein (BiP) heat shock protein 70 | EB449843 |
| EB678910_at | -7.9224567 | transcription factor bHLH93-like | EB678910 |
| C6096_at | -7.8849688 | zinc finger (b-box type) family protein | EB429775 |
| EB446456_s_at | -7.880646 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | EB446456 |
| C6364_at | -7.825445 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | EB427945 |
| C9322_at | -7.7824793 | peroxidase | D42064 |
| DW000433_s_at | -7.736907 | lipid transfer protein | DW000433 |
| EB440806_s_at | -7.7316666 | glycoside hydrolase starch-binding domain-containing protein | EB440806 |
| DV998866_s_at | -7.7282314 | DCD (Development and Cell Death) domain protein | DV998866 |
| C5409_at | -7.723856 | fasciclin-like arabinogalactan protein | EB439042 |
| C9555_at | -7.678802 | early nodulin-like protein 8 (ENODL8) | CV020181 |
| C8359_x_at | -7.665864 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protei | BP532100 |
| C24_s_at | -7.639516 | salicylic acid or by tmv during systemic acquired resistance | EB684159 |
| AB032531_at | -7.6301613 | serine protease-like protein | AB032531 |
| C8905_at | -7.612692 | aspartyl protease | CN824923 |
| EB443912_at | -7.599069 | GDSL esterase/lipase | EB443912 |
| C215_at | -7.574215 | stress-responsive protein | EB683174 |
| CV017997_s_at | -7.5627403 | Auxin-responsive family protein | CV017997 |
| C850_s_at | -7.5516615 | | EB679635 |
| C6907_at | -7.539602 | lipid transfer | EB425248 |
| EB444844_at | -7.5175004 | Non-specific lipid-transfer protein 12 | EB444844 |

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| C5736_s_at | -7.498266 | Fasciclin-like arabinogalactan protein 17 | EB434996 |
| C4075_s_at | -7.490169 | L-ascorbate oxidase/laccase | EB448781 |
| EB442423_s_at | -7.4837775 | polygalacturonase | EB442423 |
| BP532414_at | -7.4808245 | Extensin-like protein (ELP) | BP532414 |
| C2621_at | -7.443304 | Protein kinase-like protein | DV161425 |
| EB425788_s_at | -7.4316287 | | EB425788 |
| BP530319_at | -7.424737 | | BP530319 |
| DW001419_at | -7.4169817 | able to induce HR-like lesions | DW001419 |
| TT10_K24_at | -7.3944736 | | |
| BC3M2212_s_at | -7.393539 | protein ABIL2-like | AJ538563 |
| C143_at | -7.3878164 | Thionin-like protein 2 | EB683582 |
| BP528462_s_at | -7.3823695 | metallocarboxypeptidase inhibitor precursor | BP528462 |
| C6836_s_at | -7.3809023 | ACT domain-containing protein | EB425599 |
| DW001236_at | -7.380619 | | DW001236 |
| C9204_at | -7.2930503 | phospholipase a2 | AB190178 |
| C4973_at | -7.2842054 | Beta-glucosidase 17 | EB441923 |
| C5132_at | -7.281454 | UDP-glucuronate 4-epimerase 6-like | EB440841 |
| C5377_at | -7.271848 | major pollen allergen ole e 1 | EB439226 |
| TT25_E02_at | -7.255414 | Aspartyl protease-like protein | |
| EB442082_at | -7.2543397 | | EB442082 |
| C1540_at | -7.2454853 | | DW003768 |
| TT15_H12_at | -7.2355566 | Ethylene-responsive transcription factor ERF012 | |
| EB681115_s_at | -7.2143097 | short-chain dehydrogenase/reductase 2b-like (| EB681115 |
| TT21_P13_s_at | -7.1949806 | | |
| EB678816_at | -7.1781907 | wd repeat domain 89 | EB678816 |
| TT02_J20_s_at | -7.175803 | Rotamase cyclophilin 2 (ROC2) | |
| BP535490_at | -7.1559615 | | BP535490 |
| TT04_A03_s_at | -7.1451397 | FASCICLIN-like arabinogalactan protein 16 precursor (FLA16) | |

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| EB441956_s_at | -7.1442375 | eburicol 14 alpha-demethylase | EB441956 |
| C9181_at | -7.1340466 | pectin methylesterase | AJ401158 |
| C5483_at | -7.1312833 | chloroplast lipocalin | EB438594 |
| C5049_at | -7.130978 | Fasciclin-like arabinogalactan protein 17 | EB441426 |
| C11494_at | -7.1008053 | Gibberellin-regulated family protein | BP532014 |
| BP530783_at | -7.075037 | DVL5 | BP530783 |
| C4266_at | -7.0606318 | transmembrane protein of the tetraspanin (TET) family | EB447588 |
| C10662_s_at | -7.0177355 | Calcium-dependent lipid-binding (CaLB domain) family protein | |
| CV015963_s_at | -6.9879103 | thionin-like protein 2-like | CV015963 |
| C871_s_at | -6.9713097 | protease inhibitor seed storage lipid transfer proteinfamily protein | EB679527 |
| TT02_G02_at | -6.9564223 | WOX4 gene | |
| C426_s_at | -6.956057 | Pollen Ole e 1 allergen and extensin family protein | EB681729 |
| CV021255_s_at | -6.9262533 | endoxyloglucan transferase related protein | CV021255 |
| BP532158_at | -6.8924723 | | BP532158 |
| EB449704_s_at | -6.885508 | COB, COBRA | EB449704 |
| C8940_x_at | -6.871153 | hemoglobin | BQ842986 |
| BP532414_s_at | -6.865347 | extensin | BP532414 |
| C116_s_at | -6.8595405 | acid phosphatase | EB683692 |
| C4373_at | -6.8452177 | GDSL esterase/lipase | EB446815 |
| CV019241_x_at | -6.816957 | | CV019241 |
| TT23_M15_at | -6.8095303 | WOX4 homeodomain transcription factor | |
| DW001992_at | -6.8066983 | Basic leucine zipper transcription factor-like protein | DW001992 |
| C8940_at | -6.7726865 | hemoglobin | BQ842986 |
| EB446455_at | -6.765669 | Arabidopsis thaliana: arabinogalactan protein 12 | EB446455 |
| C6561_at | -6.7596183 | methylesterase PCR A | EB426946 |
| TT35_M05_s_at | -6.736741 | | |
| TT31_D02_s_at | -6.686287 | Protein ABIL2 | |
| BP532314_at | -6.6844816 | SGS3-like proteins that act redundantly in RNA-directed DNA methylation | BP532314 |
| TT19_C23_s_at | -6.683345 | Nucleotide-diphospho-sugar transferases superfamily protein | |

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| DW001419_x_at | -6.667913 | | DW001419 |
| C850_at | -6.6373715 | | EB679635 |
| DW003786_at | -6.6247706 | | DW003786 |
| AF307095_at | -6.6218534 | aldose 1-epimerase | AF307095 |
| C11184_at | -6.617013 | | EB427694 |
| C4579_at | -6.601823 | trehalose-phosphatase | EB444882 |
| C3264_at | -6.6014123 | monocopper oxidase-like protein SKU5-like | DV158203 |
| C215_s_at | -6.5994043 | stress-responsive protein | EB683174 |
| C9630_s_at | -6.5986543 | Methionine rich arabinogalactan | DV999414 |
| C6759_at | -6.5847497 | probable carbohydrate esterase | EB425998 |
| EB442153_at | -6.5755177 | malonyltransferase | EB442153 |
| C3250_at | -6.571235 | Lipase/lipoxygenase | DV158275 |
| CV017162_s_at | -6.5684447 | dehydroascorbate reductase | CV017162 |
| DW004773_at | -6.562682 | | DW004773 |
| C6195_s_at | -6.5272465 | polygalacturonase | EB428764 |
| C4592_at | -6.524379 | | EB444810 |
| C8254_at | -6.5228286 | cytochrome p450 | BP533216 |
| EB430324_at | -6.5071373 | | EB430324 |
| EB451890_at | -6.476693 | auxin-repressed protein | EB451890 |
| C3794_at | -6.4750323 | calmodulin | EB450286 |
| TT39_L18_at | -6.465333 | | |
| BP532316_at | -6.4466453 | Gibberellin-regulated GASA/GAST/Snakin family protein | BP532316 |
| TT20_C10_at | -6.405398 | | |
| EB449243_at | -6.3770976 | | EB449243 |
| AJ717871_x_at | -6.352075 | | AJ717871 |
| EB441353_at | -6.350569 | Probable xyloglucan endotransglucosylase/hydrolase protein 15 | EB441353 |
| CV021041_x_at | -6.343659 | | CV021041 |
| C9204_x_at | -6.328752 | phospholipase a2 | AB190178 |

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| BP527831_at | -6.315571 | Cell division control 6 | BP527831 |
| BP131083_at | -6.3151107 | Receptor-like protein kinase HERK 1 | BP131083 |
| EB441283_at | -6.3076477 | beta-galactosidase | EB441283 |
| DW003963_at | -6.302682 | transferase family protein cellulose synthase-likeglycosyltransferase family 2 protein mannan | DW003963 |
| C4273_at | -6.287836 | synthase | EB447546 |
| C3209_s_at | -6.264532 | Alpha-xylosidase | DV158466 |
| EB425593_at | -6.2500377 | | EB425593 |
| TT39_L14_s_at | -6.2285132 | GDP-D-mannose pyrophosphorylase | |
| DV157811_at | -6.2275066 | Triacylglycerol lipase 2-like | DV157811 |
| BP136988_at | -6.21113 | Calmodulin-like protein 1 | BP136988 |
| EB429518_at | -6.2081294 | Acyl-CoA N-acyltransferases (NAT) superfamily protein | EB429518 |
| TT26_H23_s_at | -6.168269 | Cytochrome c oxidase 19-1 | |
| CV017750_at | -6.1495852 | pathogenesis-related protein 1 | CV017750 |
| EB443044_at | -6.148384 | beta--glucanase | EB443044 |
| C8384_at | -6.120287 | | BP531819 |
| C3831_at | -6.118137 | arabinogalactan protein (Agp4) | EB450059 |
| BP535490_s_at | -6.07884 | | BP535490 |
| EB679953_at | -6.077741 | aspartyl protease | EB679953 |
| C9889_at | -6.06178 | phosphoglycerate mutase | |
| C11671_s_at | -6.057898 | GDSL esterase/lipase | BP529892 |
| TT06_C22_at | -6.0573516 | transducin family protein wd-40 repeat family protein | |
| CV021091_x_at | -6.0526276 | E3 ubiquitin-protein ligase | CV021091 |
| C9760_s_at | -6.0366974 | | |
| CV020484_at | -6.0250745 | Nicotiana tabacum mRNA for P-rich protein NtEIG-C29 | CV020484 |
| BP130303_at | -6.019741 | LRR receptor-like serine/threonine-protein kinase FLS2 | BP130303 |
| C9580_at | -6.016132 | arabinogalactan peptide 22-like | CV021808 |
| DV158337_at | -6.0153666 | UPA19 mRNA | DV158337 |
| C6983_at | -5.98439 | protein YLS9-like | EB424834 |

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| C8359_at | -5.9801745 | inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein | BP532100 |
| C3513_at | -5.9779334 | L-ascorbate oxidase | EB451727 |
| TT21_O12_at | -5.950732 | wrky transcription factor | |
| C4144_at | -5.940763 | protein kinase | EB448246 |
| DW003786_s_at | -5.927376 | | DW003786 |
| EB451442_at | -5.9039826 | Putative wound-responsive protein | EB451442 |
| C10586_at | -5.9002047 | SGNH hydrolase-type esterase superfamily | |
| C4250_x_at | -5.8873763 | Xyloglucan endotransglucosylase/hydrolase protein 9 | EB447692 |
| C4214_at | -5.8817554 | Leucine-rich repeat (LRR) family protein | EB447864 |
| C8759_x_at | -5.8751435 | metallocarboxypeptidase inhibitor-like | CV018121 |
| C6748_s_at | -5.863595 | polygalacturonase inhibitor protein | EB426043 |
| DV999740_s_at | -5.8624663 | ---NA--- | DV999740 |
| CV021588_at | -5.846347 | Putative wound-responsive protein | CV021588 |
| DW002576_at | -5.8340855 | L-arabinose metabolic process | DW002576 |
| C6195_at | -5.8246408 | polygalacturonase | EB428764 |
| BP525741_s_at | -5.815532 | necap endocytosis associated 1 | BP525741 |
| EB427315_at | -5.803362 | malonyl-coenzyme:anthocyanin 5-O-glucoside-6"-O-malonyltransferase | EB427315 |
| C6265_s_at | -5.7947106 | stearoyl-acyl carrier protein desaturase | EB428414 |
| TT48_L09_at | -5.789268 | serine carboxypeptidase 1 | |
| BP533711_at | -5.7812448 | SAUR-like auxin-responsive protein family | BP533711 |
| TT47_C01_at | -5.7700477 | arabinogalactan-like protein | |
| EB428861_s_at | -5.767629 | fasciclin-like arabinogalactan-protein | EB428861 |
| C9763_at | -5.758059 | Pollen Ole e 1 allergen and extensin family protein | EB680840 |
| EB447502_s_at | -5.7573957 | at1g29980 t1p2_9 | EB447502 |
| EB438607_s_at | -5.74463 | alcohol dehydrogenase | EB438607 |
| BP526697_at | -5.7314596 | | BP526697 |
| CV017834_at | -5.728168 | Putative wound-responsive protein | CV017834 |
| BP136388_at | -5.7154093 | Xyloglucan endotransglucosylase/hydrolase protein 8 | BP136388 |
| C5335_s_at | -5.7146754 | Nucleotide-diphospho-sugar transferases superfamily protein | EB439534 |
| EB445248_at | -5.696052 | L-ascorbate oxidase | EB445248 |
| C7833_at | -5.6951504 | gibberellin regulated protein | BP130526 |

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| C8446_at | -5.6895895 | homeobox-leucine zipper protein ATHB-6-like | BP530992 |
| C10911_at | -5.6831 | Protein disulfide-isomerase LQY1 | DV999280 |
| BP130895_at | -5.6824126 | Cyclophilin-like peptidyl-prolyl cis-trans isomerase family protein heavy-metal-associated domain-containing protein copper chaperone-related | BP130895 |
| DW002621_at | -5.676117 | | DW002621 |
| C3871_at | -5.6654897 | haloacid dehalogenase-like hydrolase domain containing 3 | EB449894 |
| AF211736_x_at | -5.5770407 | SAUR-like auxin-responsive protein Octicosapeptide/Phox/Be.1 domain-containing protein kinase (AT1G16270) | AF211736 |
| C3702_s_at | -5.5513396 | | EB450793 |
| C3609_at | -5.548921 | Xyloglucan endotransglucosylase/hydrolase protein 9 | EB451243 |
| C4208_at | -5.5462966 | arf16 | EB447890 |
| TT31_B05_s_at | -5.5399923 | Kunitz family trypsin and protease inhibitor protein | |
| C3590_at | -5.5393295 | UDP-glucuronate 4-epimerase 6-like | EB451340 |
| DW001779_at | -5.536809 | | DW001779 |
| C2295_at | -5.5322523 | ---NA--- | DV999327 |
| C9406_at | -5.532007 | protein | D26015 |
| DW003435_at | -5.52878 | BEL1-like homeodomain protein 2-like (| DW003435 |
| C2496_at | -5.524678 | | DV162279 |
| BP128456_at | -5.51576 | SNF1-related protein kinases (SnRK2) | BP128456 |
| C8287_at | -5.5100775 | late embryogenesis abundant lea | BP532844 |
| TT33_B18_s_at | -5.5061426 | fruit protein pKIWI501- | |
| C9740_at | -5.496557 | plastid-specific ribosomal protein 6 precursor (Psrp-6) | CV017749 |
| C5233_at | -5.4904084 | pectinesterase inhibitor | EB440173 |
| BP132676_at | -5.490041 | Avr9/Cf-9 rapidly elicited protein 1 (ACRE1) | BP132676 |
| TT20_J08_at | -5.4795747 | ABA-REGULATED RNA-BINDING PROTEIN 1, ARP1 | |
| EB444997_at | -5.478812 | EXORDIUM like 3 (EXL3) | EB444997 |
| C3051_at | -5.467461 | superoxide dismutase | DV159202 |
| DW004594_at | -5.4666586 | | DW004594 |
| DV160510_at | -5.466327 | | DV160510 |
| C2755_at | -5.4622145 | | DV160722 |
| AJ718848_at | -5.4602065 | THESEUS1 (THE1) | AJ718848 |

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| AF154651_x_at | -5.459638 | extensin-3-like | AF154651 |
| C8874_at | -5.459363 | wrky transcription factor | CV016080 |
| C426_at | -5.4591293 | Pollen Ole e 1 allergen and extensin family protein | EB681729 |
| BT2M435_at | -5.443435 | sugar transporter | AJ538920 |
| AF211697_at | -5.4242306 | | AF211697 |
| C3510_s_at | -5.416109 | Lipase/lipoxygenase | EB451748 |
| C11465_at | -5.4075465 | RAB GTPASE A2A | EB448387 |
| C4678_at | -5.39326 | Calcium-dependent lipid-binding (CaLB domain) family protein | EB444002 |
| C9381_x_at | -5.385193 | GDP-D-mannose pyrophosphorylase | AB066279 |
| C3094_at | -5.3807144 | Tts-2 | DV159040 |
| BP530115_at | -5.3673096 | late embryogenesis abundant lea | BP530115 |
| CV021091_s_at | -5.359112 | E3 ubiquitin-protein ligase | CV021091 |
| TT07_H22_at | -5.349453 | | |
| CV019283_at | -5.34658 | | CV019283 |
| CV017546_s_at | -5.3418055 | PHYTOCYSTATIN 6 | CV017546 |
| AB050849_at | -5.339622 | calmodulin | AB050849 |
| C5288_x_at | -5.3345695 | phospholipase a2 | EB439873 |
| C8585_at | -5.3056555 | E3 ubiquitin-protein ligase | CV020977 |
| DW004785_at | -5.3034344 | serine carboxypeptidase ii | DW004785 |
| C5069_s_at | -5.301984 | polygalacturonase isoenzyme 1 beta subunit | EB441302 |
| EB451343_s_at | -5.3014116 | anthocyanidin synthase | EB451343 |
| DV999434_at | -5.301191 | polygalacturonase | DV999434 |
| C9991_at | -5.3003945 | ACT domain-containing protein | EB425597 |
| EB450537_x_at | -5.2970915 | | EB450537 |
| C5274_at | -5.294839 | protein transport protein sec22 | EB439977 |
| EB442705_at | -5.293634 | Glutamyl/glutaminyl-tRNA synthetase | EB442705 |
| C3002_at | -5.290288 | cellulose synthase | DV159432 |
| TT15_C18_s_at | -5.2896543 | calmodulin | |
| EB440264_at | -5.2769523 | | EB440264 |
| EB445463_at | -5.264033 | | EB445463 |
| EB429551_at | -5.259178 | xyloglucan endotransglucosylase/hydrolase protein 27 | EB429551 |

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|---------------|------------|---|----------|
| DW000553_at | -5.245237 | | DW000553 |
| DV162146_at | -5.245152 | cytochrome p450 | DV162146 |
| C10641_at | -5.2360563 | | EB442166 |
| C414_at | -5.2253833 | SEC14 cytosolic factor family protein | EB681788 |
| C5288_at | -5.2222314 | phospholipase a2 | EB439873 |
| C6834_at | -5.219352 | expansin | EB425605 |
| C6446_at | -5.213243 | cellulose synthase | EB427625 |
| TT24_L07_at | -5.210474 | sialyltransferase-like protein heavy-metal-associated domain-containing protein copper chaperone- related | |
| C4662_at | -5.1979117 | | EB444180 |
| BP530474_at | -5.1906047 | auxin-induced-like protein | BP530474 |
| BP130156_at | -5.1882567 | disease resistance-responsive family protein | BP130156 |
| C4722_at | -5.187245 | Polyphenol oxidase 5 mRNA | EB443535 |
| EB448541_at | -5.1766005 | arabinogalactan-like protein | EB448541 |
| TT38_H04_at | -5.1733184 | | |
| EB433828_at | -5.172084 | pectinesterase | EB433828 |
| C3287_at | -5.171082 | 2og-feoxygenase | DV158087 |
| C6191_at | -5.166244 | sucrose synthase | EB428780 |
| EB433753_at | -5.160203 | tom5 (mitochondrial import receptor subunit tom5 homolog) | EB433753 |
| EB448049_at | -5.151793 | basic helix-loop-helixfamily protein | EB448049 |
| TT02_N06_at | -5.1465654 | 2-aminoethanethiol dioxygenase | |
| BP137194_at | -5.140025 | SAUR-like auxin-responsive protein family | BP137194 |
| C9116_s_at | -5.137154 | peroxidase | AB044154 |
| TT36_G22_s_at | -5.1331935 | eburicol 14 alpha-demethylase | |
| EB681482_at | -5.1291637 | nep1-interacting protein 2 | EB681482 |
| C10021_s_at | -5.1256075 | peroxidase | AB044153 |
| C7177_s_at | -5.1238093 | serine carboxypeptidase family protein | BP528080 |
| CV020787_s_at | -5.108823 | | CV020787 |
| C8843_s_at | -5.0917387 | ---NA--- | CV016617 |
| TT12_C07_at | -5.0724435 | fasciclin-like arabinogalactan protein 1 | |
| C9826_x_at | -5.068306 | | |
| C1501_at | -5.056949 | | DW004020 |

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|---------------|------------|--|----------|
| TT06_J21_at | -5.047513 | xanthine uracil vitamin c permease | |
| C9103_at | -5.046285 | allene oxide synthase | DQ129870 |
| EB430708_at | -5.0437217 | hydroperoxide lyase | EB430708 |
| EB442153_x_at | -5.039716 | quercetin 3-o-glucoside-6-o-malonyltransferase | EB442153 |
| C709_at | -5.0390224 | UDP-Glycosyltransferase superfamily protein | EB680256 |
| BP133693_at | -5.0367007 | dof zinc finger protein DOF4.6-like | BP133693 |
| BP532669_at | -5.030853 | ergosterol28 (ERG28) | BP532669 |
| CV019787_x_at | -5.030683 | | CV019787 |
| EB428276_at | -5.023913 | RAB GTPase homolog A4A (RABA4a) | EB428276 |
| EB681961_at | -5.0141826 | protein | EB681961 |
| C1626_at | -5.013866 | protein | DW003178 |
| C3783_s_at | -5.0095086 | TETRASPANIN3 | EB450386 |
| EB426528_s_at | -5.006968 | protein phosphatase 2c | EB426528 |
| AAAT330_s_at | -5.0009904 | WRKY transcription factor 40 | |
| BP527306_s_at | -5.000776 | serine/threonine-protein kinase | BP527306 |

HYBRIDIZATION 3: LIST OF UP-REGULATED GENES

| Probe Set ID | Fold Change ([0.1.TIP.ACR3] vs [TIP.ACR3]) | Blast2GO description | Genbank Accessions |
|---------------|--|--|-----------------------|
| BT2M444_at | 94.78867 | Serine/threonine-protein phosphatase 7 long form homolog | AJ538927 |
| EB643469_at | 60.656437 | 60s acidic ribosomal protein p1 | EB643469 |
| BC1M4448_s_at | 59.890564 | | AJ538430 |
| DW002835_at | 48.910328 | peroxidase | DW002835 |
| C8646_at | 39.987415 | chitinase | CV019934 |
| AF211619_at | 38.101635 | | AF211619 |
| C7375_at | 38.005104 | wall-associated serine threonine kinase | BP525596 |
| CV021716_at | 37.022026 | Cupredoxin superfamily protein | CV021716 |
| BP533429_at | 33.977386 | | BP533429 |

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|---------------|------------|--|----------|
| EB682553_at | 32.612125 | N.tabacum eIF-4A4 gene | EB682553 |
| DV159578_at | 32.46009 | retrotransposon Tnt1 | DV159578 |
| TT39_L17_at | 31.106817 | lysine-ketoglutarate reductase | |
| U92011_at | 31.003906 | apocytochrome b | U92011 |
| C2117_x_at | 30.173931 | 1-aminocyclopropane-1-carboxylate oxidase | DW000224 |
| BP130464_at | 28.32327 | Plastocyanin-like domain-containing | BP130464 |
| C3356_at | 27.965483 | Late embryogenesis abundant domain-containing protein | DV157779 |
| EB680720_at | 26.855312 | atpase subunit 8 | EB680720 |
| TT19_B11_at | 25.119774 | 50s ribosomal protein l16 | |
| C7180_at | 24.22236 | cytochrome oxidase subunit i | BP528067 |
| EB427540_at | 23.889462 | DNA repair metallo-beta-lactamase family protein | EB427540 |
| EB678509_at | 23.709187 | oleosin | EB678509 |
| EB429701_at | 22.212032 | | EB429701 |
| C5842_at | 21.762426 | heat shock protein 90 | EB432766 |
| AJ717868_at | 21.5149 | | AJ717868 |
| C11724_at | 21.256386 | DNA repair metallo-beta-lactamase family protein | AJ718369 |
| TT03_E19_at | 20.9813 | | |
| EB429725_at | 19.78828 | carbonic anhydrase | EB429725 |
| EB430306_s_at | 19.444479 | heat shock protein 90 | EB430306 |
| C2925_s_at | 18.269342 | Serine-glyoxylate aminotransferase | DV159853 |
| C5269_at | 18.208445 | Expansin-like B1 | EB440002 |
| GC227C_at | 16.475275 | Tobacco mitochondrial ATPase subunit 9 gene | |
| C5541_at | 15.894509 | metallothiol transferase FosB | EB438261 |
| EB432568_at | 15.705689 | 5'-adenylylsulfate reductase | EB432568 |
| | | lysine-ketoglutarate reductase saccharopine dehydrogenase bifunctional | |
| EB445091_at | 14.869991 | enzyme | EB445091 |
| BP530824_at | 14.845862 | | BP530824 |
| DV158314_at | 14.804705 | | DV158314 |
| C10869_at | 14.3595705 | lea protein | |

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|-------------|------------|--|----------|
| BP530569_at | 13.674304 | fibrillarin | BP530569 |
| EB443313_at | 13.639891 | Nicotiana tabacum mitochondrial DNA | EB443313 |
| C9897_at | 13.475845 | cytochrome c oxidase | |
| BP137485_at | 13.305668 | Retrotransposon Tnt1 | BP137485 |
| C4145_at | 13.282584 | chloroplast chlorophyll a-b binding protein mRNA | EB448243 |
| C8103_at | 13.248269 | Aluminum-activated malate transporter | BP534838 |
| BP531956_at | 13.080375 | Chloroplast RNA helicase VDL (VDL) gene | BP531956 |
| EB427637_at | 13.012735 | | EB427637 |
| C1241_s_at | 12.817417 | Glycine-rich protein / oleosin | EB677486 |
| C10612_at | 12.804549 | metallothiol transferase FosB | DV999688 |
| TT47_C24_at | 12.668591 | selenium-binding protein | |
| C2925_at | 12.615765 | Serine-glyoxylate aminotransferase | DV159853 |
| AJ632753_at | 12.569162 | | AJ632753 |
| DV159109_at | 12.469929 | | DV159109 |
| C5328_at | 12.425268 | Methyl-CpG-binding domain-containing protein 11 | EB439611 |
| X63106_at | 12.389864 | heat shock protein 70 | X63106 |
| AB210290_at | 11.509759 | | AB210290 |
| C8498_at | 11.390982 | 5-adenylylsulfate reductase | BP530443 |
| C1231_s_at | 11.384367 | malate synthase | EB677524 |
| EB438150_at | 11.335131 | | EB438150 |
| TT38_L10_at | 11.035889 | auxin-induced protein | |
| BP530384_at | 10.971546 | mitochondrion | BP530384 |
| C3462_at | 10.931612 | ATP synthase subunit 9, mitochondrial | EB451960 |
| C6090_at | 10.873603 | methionine gamma-lyase | EB429856 |
| C2417_at | 10.818846 | SC35-LIKE SPLICING FACTOR 33 | DV162718 |
| CV019875_at | 10.67395 | | CV019875 |
| BP528038_at | 10.58058 | Retroviral-like transposon Tnt 1-94 | BP528038 |
| EB444453_at | 10.5774555 | | EB444453 |

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|---------------|-----------|---|----------|
| CV019875_x_at | 10.520735 | | CV019875 |
| C4952_at | 10.480574 | proline oxidase/dehydrogenase 1 (PROX1) | EB442065 |
| TT47_C04_at | 10.426204 | lactoylglutathione lyase family protein glyoxalase i family protein | |
| C9928_at | 10.318695 | alpha beta hydrolase fold | EB430594 |
| C6117_at | 10.02768 | heat shock protein | EB429529 |
| C11418_x_at | 9.98329 | Nicotiana tabacum UP-9A mRNA | BP533592 |
| BP131163_at | 9.92178 | | BP131163 |
| BT1M4115_at | 9.887013 | | AJ538819 |
| EB427388_at | 9.877193 | n-acylethanolamine amidohydrolase | EB427388 |
| GC174_at | 9.87251 | tonoplast intrinsic protein (beta-TIP) | |
| C10843_s_at | 9.777631 | Chloroplast heat shock protein-binding protein | DW000227 |
| C1463_s_at | 9.660004 | proline oxidase/dehydrogenase 2 (PROX2) | DW004233 |
| C2077_at | 9.636426 | Aldo/keto reductase | DW000438 |
| BP137193_at | 9.566416 | | BP137193 |
| C3078_s_at | 9.308615 | | DV159089 |
| C9143_at | 9.265868 | lipoxygenase | X84040 |
| C5145_s_at | 9.241723 | methionine gamma-lyase | EB440770 |
| C9055_at | 9.177062 | 26S proteasome non-ATPase regulatory subunit 1-like | AJ717852 |
| EB682212_s_at | 9.1657095 | Vacuolar fusion protein CCZ1 homolog, transcript variant 2 | EB682212 |
| C3863_at | 9.095223 | galactinol-sucrose galactosyltransferase | EB449916 |
| C3912_s_at | 9.05353 | | EB449715 |
| C8177_at | 9.011604 | Nicotiana tabacum UP-9A | BP534005 |
| EB424731_s_at | 8.989243 | 5-cytosolic ii | EB424731 |
| C11463_at | 8.903249 | | BP530060 |
| BP533466_x_at | 8.860395 | selenium binding protein 1 | BP533466 |
| C10601_at | 8.828335 | Nicotiana tabacum mitochondrial DNA | BP533038 |
| EB438412_at | 8.737688 | hsp70-interacting protein | EB438412 |
| TT16_N05_at | 8.411699 | desiccation-related protein | |
| C11038_x_at | 8.377638 | Nicotiana tabacum UP-9A mRNA, | EB445189 |

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|---------------|-----------|--|----------|
| C9165_at | 8.292934 | heat shock protein 90 | X63195 |
| BT1M3124_x_at | 8.25207 | | AJ538793 |
| C506_at | 8.244821 | 5'-adenylylsulfate reductase 3 | EB681340 |
| BP531744_s_at | 8.210846 | multiprotein bridging factor 1 | BP531744 |
| TT32_K05_at | 8.151088 | | |
| BP532514_at | 8.144082 | | BP532514 |
| TT20_K20_at | 8.109053 | WRAF2 mRNA for wound-responsive AP2 like factor 2, | |
| CN824887_at | 7.990636 | 4-coumarate:CoA ligase-like mRNA | CN824887 |
| C10654_at | 7.9491844 | threonyl-trna synthetase | |
| C8211_at | 7.9286556 | Lhcb1*2, Lhcb1*3, Lhcb1*4 genes for light harvesting chlorophyll a/b-binding protein | BP533614 |
| TT04_E12_at | 7.867644 | Lhcb1*5, Lhcb1*6 genes for light harvesting chlorophyll a/b-binding protein | |
| EB436530_at | 7.8449206 | Populus trichocarpa SAUR family protein (SAUR21) | EB436530 |
| BP133732_s_at | 7.8269243 | mitochondrial dicarboxylate carrier protein | BP133732 |
| EB428562_at | 7.81473 | heat shock protein 70 | EB428562 |
| EB678365_at | 7.775693 | Chromatin modification-related protein EAF6 | EB678365 |
| BP531924_at | 7.6574316 | Presumably centromeric region | BP531924 |
| EB444268_at | 7.6134243 | Putative PAP-specific phosphatase, mitochondrial-like | EB444268 |
| EB436466_s_at | 7.5823827 | | EB436466 |
| AB032546_at | 7.577704 | polyubiquitin | AB032546 |
| AJ717975_at | 7.5476713 | inactive poly [ADP-ribose] polymerase SRO4 | AJ717975 |
| EB450324_at | 7.5310254 | inactive poly [ADP-ribose] polymerase SRO2-like | EB450324 |
| EB430444_at | 7.469731 | polyubiquitin | EB430444 |
| C4499_at | 7.4423914 | glutathione s-transferase | EB445649 |
| BP534042_at | 7.378345 | | BP534042 |
| BT1M3124_at | 7.349646 | | AJ538793 |
| AJ717979_at | 7.3481827 | | AJ717979 |
| C3078_at | 7.2724285 | | DV159089 |
| BP135203_at | 7.1976376 | | BP135203 |

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|---------------|-----------|---|----------|
| DW004733_s_at | 7.108734 | Chromatin modification-related protein EAF6 | DW004733 |
| CV021233_x_at | 7.1033077 | polyubiquitin | CV021233 |
| BP533822_at | 6.9857845 | transducin wd-40 repeat | BP533822 |
| DV160812_at | 6.9499936 | DNAJ heat shock protein-like protein | DV160812 |
| C6991_at | 6.9046206 | maternal effect embryo arrest 66 | EB424810 |
| C6498_at | 6.8961854 | Nicotiana tabacum mitochondrial DNA | EB427327 |
| C3421_at | 6.893476 | FGGY family of carbohydrate kinase | EB643473 |
| C10420_at | 6.889064 | mitochondrial substrate carrier family protein | |
| C5953_s_at | 6.811754 | Heat shock protein 70 (HSP70) | EB431543 |
| EB431293_at | 6.7497807 | cytosolic purine 5'-nucleotidase | EB431293 |
| BP530000_at | 6.6839137 | F-box/kelch-repeat protein | BP530000 |
| TT23_F23_at | 6.6178703 | polyubiquitin | |
| C8112_at | 6.584109 | | BP534683 |
| C3912_at | 6.5565553 | | EB449715 |
| EB445138_at | 6.532165 | | EB445138 |
| BP530998_at | 6.5084605 | | BP530998 |
| C10084_at | 6.440319 | Solanum lycopersicum indole-3-acetic acid-induced protein ARG7-like | |
| EB438663_at | 6.4346027 | mitochondrial dicarboxylate carriers (DIC) | EB438663 |
| C11329_at | 6.4145174 | galactinol-sucrose galactosyltransferase 5- | |
| BT44M24_at | 6.315673 | fatty acid amide hydrolase-like | AJ539074 |
| TT23_D23_s_at | 6.3092065 | peptidyl-prolyl cis-trans isomerase FKBP20-2 | |
| C635_s_at | 6.248128 | alpha-amylase | EB680611 |
| EB643479_x_at | 6.246429 | proline oxidase/dehydrogenase 2 (PROX2) | EB643479 |
| TT03_O23_at | 6.207323 | aldose 1-epimerase | |
| TT05_I22_s_at | 6.198972 | cysteine protease | |
| EB449645_s_at | 6.1736245 | alpha-amylase | EB449645 |
| C7263_at | 6.111106 | 4-coumarate--CoA ligase-like 1 | BP526870 |
| BP535324_at | 6.0922074 | Mitochondrial carrier protein MTM1 | BP535324 |
| TT35_A07_at | 6.083922 | UDP-glucose flavonoid 3-O-glucosyltransferase 3 | |

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|---------------|-----------|--|--------------|
| BC2M4121_at | 6.0719013 | dynamamin 3 | AJ538518 |
| C11690_at | 6.0599117 | | AJ719169 |
| TT40_B19_at | 6.0237174 | Nodulin-like protein | |
| C798_at | 6.021119 | nad-dependent epimerase dehydratase | EB679873 |
| EB451598_at | 5.981436 | | EB451598 |
| C9364_at | 5.963548 | divinyl ether synthase (des1) | AF070976 |
| C5740_s_at | 5.900073 | beta-amylase | EB434926 |
| C2313_at | 5.896149 | chaperone protein | DV999234 |
| C11699_at | 5.890502 | alcohol dehydrogenase | AB210296 |
| TT17_A14_at | 5.888896 | cell division cycle | |
| C3134_at | 5.877344 | malate synthase | DV158814 |
| C8120_at | 5.8711834 | zinc finger protein (PMZ) | BP534647 |
| BP131209_s_at | 5.8589787 | dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3-glucosyltransferase Ricinus communis Hepatocyte growth factor-regulated tyrosine kinase substrate | BP131209 |
| BP534501_at | 5.847976 | | BP534501 |
| BC4M3318_at | 5.8460126 | Associated receptor kinase 3-like | AJ538706 |
| C10856_at | 5.841828 | peptidyl-prolyl cis-transfkbp-type | EB437088 |
| C8110_at | 5.8401513 | FACT complex subunit SPT16 | BP534697 |
| AJ717975_s_at | 5.8151307 | inactive poly [ADP-ribose] polymerase SRO4 | AJ717975 |
| TT36_K04_at | 5.811603 | branched-chain amino acid aminotransferase | |
| BP133516_at | 5.7918673 | ubiquitin-conjugating enzyme | BP133516 |
| EB680102_at | 5.7874823 | dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3-glucosyltransferase | EB680102 |
| BP531744_at | 5.766052 | Ethylene-responsive transcriptional coactivator (ER24) | BP531744 |
| BP130204_at | 5.748791 | | BP130204 |
| C6489_at | 5.7123356 | | EB427399 |
| TT33_E11_at | 5.704223 | Mechanosensitive ion channel protein 3 | XM_004237947 |
| TT33_K04_at | 5.693425 | ubiquitin-conjugating enzyme E2 23-like | |
| BP531863_at | 5.6884823 | | BP531863 |
| BP129878_at | 5.677749 | Nicotiana tabacum mitochondrial DNA | BP129878 |

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|---------------|-----------|--|--------------|
| BC1M2232_at | 5.6663556 | | AJ538396 |
| C435_at | 5.665246 | diacylglycerol acyltransferase | EB681692 |
| TT12_B04_at | 5.6519203 | F-box protein PP2-B10-like | XM_004252956 |
| C2051_at | 5.651205 | 4-hydroxyphenylpyruvate dioxygenase | DW000597 |
| C9586_at | 5.644702 | splicingarginine serine-rich 2 | |
| BP534632_at | 5.6341877 | Encodes NO VEIN (NOV) | BP534632 |
| AJ718751_at | 5.630256 | f1-atpase alpha subunit | AJ718751 |
| EB428150_at | 5.6256895 | 4-hydroxyphenylpyruvate dioxygenase | EB428150 |
| C612_x_at | 5.6115723 | s-adenosylmethionine synthetase | EB680769 |
| BP531808_at | 5.6091003 | dna polymerase zeta catalytic subunit | BP531808 |
| C1384_at | 5.6068316 | Inositol 2-dehydrogenase like protein | DW004644 |
| C1034_at | 5.5921245 | catalase 3 (cat3 gene) | EB678642 |
| DV160534_s_at | 5.5917845 | | DV160534 |
| C10603_at | 5.4851756 | | |
| C1992_at | 5.4799776 | nadh dehydrogenase | DW000926 |
| C7012_at | 5.4093075 | Clavamate synthase-like protein | EB424674 |
| C10000_at | 5.3720856 | PPPDE putative thiol peptidase family protein | EB428701 |
| EB426761_at | 5.342923 | pectate lyase | EB426761 |
| C5590_at | 5.3400154 | heat shock protein 90 | EB437835 |
| TT25_L17_at | 5.3288136 | translation initiation factor if-2 subunit gamma | |
| C4270_s_at | 5.3149586 | zinc-finger protein lsd1 | EB447552 |
| TT10_N12_at | 5.2942114 | Acyl-CoA N-acyltransferase with RING/FYVE/PHD-type zinc finger domain-containing protein | |
| BC1M128_at | 5.2923193 | ATP sulfurylase 1, chloroplastic | AJ538380 |
| AJ632717_at | 5.2858934 | | AJ632717 |
| TT30_A12_at | 5.2741756 | Nicotiana tabacum mitochondrial DNA | |
| EB437976_x_at | 5.2733917 | selenium-binding protein | EB437976 |
| C1463_at | 5.2522244 | proline dehydrogenase | DW004233 |
| C11006_at | 5.2464547 | Mitochondrial import inner membrane translocase subunit TIM14-3 | AJ344584 |

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|---------------|-----------|--|----------|
| BP135725_at | 5.239269 | ski interacting protein | BP135725 |
| TT02_D04_at | 5.226865 | gcn5-related n-acetyltransferase | |
| EB436466_at | 5.225954 | | EB436466 |
| EB682912_at | 5.2214584 | ABC transporter F family member 1-like | EB682912 |
| C3200_at | 5.2003646 | | DV158498 |
| EB450652_at | 5.180438 | | EB450652 |
| EB681943_at | 5.152413 | xanthine dehydrogenase | EB681943 |
| TT22_P12_x_at | 5.148568 | Class II transposable element slide-124 | |
| C3882_s_at | 5.100364 | splicingarginine serine-rich 5 | EB449847 |
| TT20_M13_at | 5.081677 | methylcrotonoyl-CoA carboxylase beta chain | |
| C635_at | 5.081404 | alpha-amylase | EB680611 |
| C3083_at | 5.058168 | tuftelin interacting protein 11 | DV159070 |
| EB436124_at | 5.041011 | | EB436124 |
| EB682437_at | 5.0188127 | Xaa-Pro aminopeptidase | EB682437 |
| C7650_at | 5.008736 | auxin efflux carrier family protein | BP133741 |

HYBRIDIZATION 3: LIST OF DOWN-REGULATED GENES

| Probe Set ID | Fold Change ([0.1-TIP-ACR3] vs [0-TIP-ACR3]) | Blast2GO description | Genbank Accessions |
|---------------|--|---|--------------------|
| EB444844_at | -44.46928 | lipid-transfer protein 12 | EB444844 |
| BP528462_s_at | -42.39028 | metallocarboxypeptidase inhibitor precursor [Solanum tuberosum] | BP528462 |
| EB446455_at | -40.903442 | Arabidopsis thaliana: arabinogalactan protein 12 | EB446455 |
| EB445915_s_at | -36.296726 | | EB445915 |
| C1540_at | -35.453724 | metallocarboxypeptidase inhibitor precursor [Solanum tuberosum] | DW003768 |
| C3103_at | -34.18751 | responsive to dehydration 22 (RD22) mediated by ABA | DV158987 |
| C1359_x_at | -32.275417 | Kunitz family trypsin and protease inhibitor protein | DW004832 |
| BP130906_at | -31.852144 | | BP130906 |
| TT31_B05_s_at | -31.414062 | Kunitz family trypsin and protease inhibitor protein | |

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|---------------|------------|--|----------|
| C4973_at | -30.681593 | Beta-glucosidase 17 | EB441923 |
| C1359_at | -29.373396 | Kunitz family trypsin and protease inhibitor protein | DW004832 |
| C4475_at | -28.852436 | | EB445847 |
| EB683428_at | -27.048841 | | EB683428 |
| EB445523_at | -25.382092 | | EB445523 |
| C116_s_at | -23.293474 | acid phosphatase | EB683692 |
| C4788_at | -23.106483 | polyphenol oxidase mRNA | EB443186 |
| C1903_at | -23.030838 | cytochrome p450 | DW001428 |
| EB447210_at | -22.964754 | | EB447210 |
| C10933_x_at | -22.823292 | | EB443218 |
| C768_at | -22.611866 | lipid transfer protein | EB679995 |
| C10933_at | -22.116198 | organ-specific protein S2-like | EB443218 |
| C114_at | -21.580935 | copper amine oxidase | EB683713 |
| C4250_at | -20.893816 | Xyloglucan endotransglucosylase/hydrolase protein 9 | EB447692 |
| CV020499_at | -20.801428 | defensin-like | CV020499 |
| C96_at | -20.63934 | gibberellin 20-oxidase | EB683803 |
| EB446291_at | -20.494642 | | EB446291 |
| C4426_at | -20.206194 | | EB446257 |
| EB447101_at | -20.05549 | lipoxygenase | EB447101 |
| BP535097_at | -18.809479 | germin-like protein | BP535097 |
| DW003963_at | -18.282814 | omega-hydroxypalmitate O-feruloyl transferase | DW003963 |
| C4518_s_at | -18.08103 | Tts-2 | EB445477 |
| C1335_at | -18.07165 | Aquaporin | DW004942 |
| EB439434_x_at | -18.053476 | Bidirectional sugar transporter SWEET11 | EB439434 |
| C4598_at | -17.661268 | peroxidase | EB444756 |
| | | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like | |
| C9569_at | -17.640657 | protein | BP534045 |
| C3508_at | -17.505114 | MLP-like protein 28 | EB451758 |
| C1598_at | -17.433153 | pvr3-like protein | DW003388 |

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|---------------|------------|--|----------|
| EB446456_s_at | -17.166027 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | EB446456 |
| T121_at | -16.915625 | peroxidase | |
| C871_s_at | -16.50931 | protease inhibitor seed storage lipid transfer proteinfamily protein | EB679527 |
| C4532_at | -16.279552 | Thionin-like protein 2 | EB445358 |
| C9116_at | -16.189728 | peroxidase | AB044154 |
| BP534286_at | -15.880523 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | BP534286 |
| C6364_at | -15.555234 | Bidirectional sugar transporter SWEET11 | EB427945 |
| C2370_at | -15.438823 | Protein SAR8.2e | DV998925 |
| C1890_x_at | -15.38076 | Solanum lycopersicum thionin-like protein 2-like | DW001502 |
| DW002945_at | -15.369238 | | DW002945 |
| C7241_at | -15.322387 | peroxidase | BP527084 |
| C9322_at | -15.218702 | indoleacetic acid-induced-like protein | D42064 |
| C5472_at | -15.177189 | histone h2b | EB438673 |
| BP532477_s_at | -15.079273 | UDP-glucuronate:xylan alpha-glucuronosyltransferase 2 | BP532477 |
| C4736_at | -14.799756 | UDP-glucuronate:xylan alpha-glucuronosyltransferase 2 | EB443425 |
| TT07_M15_at | -14.705972 | | |
| EB445010_at | -14.667723 | disease resistance-responsive family protein | EB445010 |
| DW005051_at | -14.626933 | | DW005051 |
| CV020237_at | -14.406301 | Aquaporin | CV020237 |
| EB682942_at | -13.948688 | | EB682942 |
| C4140_at | -13.897026 | dir1 (defective in induced resistance 1) lipid binding | EB448262 |
| EB684131_at | -13.887499 | Solanum lycopersicum probable glutathione S-transferase-like | EB684131 |
| C10896_at | -13.830045 | aquaporin TIP1-3-like | |
| EB445680_s_at | -13.635951 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | EB445680 |
| C37_s_at | -13.576567 | | EB684075 |
| C6364_x_at | -13.539053 | | EB427945 |

| | | Nicotiana glauca qpt1 gene for putative quinolinate | |
|---------------|-------------|---|----------|
| C11348_at | -13.391699 | phosphoribosyltransferase1 | CV020323 |
| BP534122_at | -13.360462 | | BP534122 |
| C11073_s_at | -13.230197 | histone h2b | AJ632937 |
| C5085_at | -13.1371765 | calcium proton exchanger | EB441141 |
| TT47_C01_at | -13.050494 | arabinogalactan-like protein | |
| C1179_at | -12.98149 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein | EB677782 |
| C2702_at | -12.776249 | protease inhibitor seed storage lipid transfer proteinfamily protein | DV160970 |
| TT08_F15_s_at | -12.7446 | | |
| C29_x_at | -12.710041 | Protein SAR8.2e | EB684133 |
| EB443226_s_at | -12.652171 | Germin-like protein subfamily | EB443226 |
| BP534122_x_at | -12.540864 | | BP534122 |
| EB447307_s_at | -12.350577 | transcription factor bHLH18-like | EB447307 |
| C11223_s_at | -12.301472 | indoleacetic acid-induced-like protein | EB425491 |
| C3781_at | -12.286347 | dCTP pyrophosphatase 1-like | EB450390 |
| C151_x_at | -12.182277 | Nicotiana tabacum putative PLA2 (F8) mRNA | EB683524 |
| C8359_at | -12.057647 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein | BP532100 |
| C11566_at | -12.056079 | Glycine-rich protein precursor (GRP-CD2) | AB041513 |
| TT18_E07_at | -11.985187 | Gibberellin-regulated GASA/GAST/Snakin family protein | |
| DW002621_at | -11.97457 | heavy-metal-associated domain-containing protein copper chaperone-related | DW002621 |
| C945_at | -11.968671 | aquaporin | EB679110 |
| C10762_at | -11.914236 | cysteine proteinase inhibitor | |
| C6191_at | -11.764191 | sucrose synthase | EB428780 |
| BP528207_at | -11.537094 | Predicted GPI-anchored protein | BP528207 |
| C143_s_at | -11.427426 | Thionin-like protein 2 | EB683582 |
| AY775032_at | -11.250175 | Avr9/Cf-9 rapidly elicited protein 34 (ACRE34) | AY775032 |

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|---------------|------------|--|----------|
| C850_at | -11.203955 | | EB679635 |
| EB446997_x_at | -11.038397 | pit1 mRNA (which expression is induced by Pi starvation) | EB446997 |
| C6907_at | -10.94558 | lipid transfer | EB425248 |
| EB450715_at | -10.939863 | protease inhibitor seed storage lipid transfer proteinfamily protein | EB450715 |
| C7027_at | -10.84958 | Transcription factor bHLH25 | AB204829 |
| C8455_at | -10.840911 | induced resistance 2 protein (DIR2) mrna inducible by salicylic acid or by tmv during systemic acquired | BP530866 |
| C24_s_at | -10.817757 | resistance | EB684159 |
| EB445478_x_at | -10.629531 | Pit1 mRNA (which expression is induced by Pi starvation) | EB445478 |
| C8287_at | -10.54398 | late embryogenesis abundant lea | BP532844 |
| C11213_at | -10.398559 | aquaporin | EB429007 |
| BP135923_at | -10.243268 | | BP135923 |
| C8254_at | -10.207974 | cytochrome p450 | BP533216 |
| C9763_at | -10.166753 | Pollen Ole e 1 allergen and extensin family protein | EB680840 |
| C3094_at | -9.890712 | Tts-1 | DV159040 |
| C10139_at | -9.888522 | | EB444635 |
| TT02_B09_at | -9.742723 | | |
| TT33_H24_s_at | -9.741345 | SAUR-like auxin-responsive protein | |
| C3506_at | -9.690702 | peroxidase | EB451764 |
| TT39_G19_at | -9.600074 | | |
| C2681_at | -9.586817 | cation transmembrane transporter activity, | DV161118 |
| EB445734_at | -9.431287 | | EB445734 |
| BP531865_at | -9.426685 | | BP531865 |
| TT27_L02_s_at | -9.4068365 | | |
| C10056_s_at | -9.393699 | arabinogalactan-like protein | EB450954 |
| C4435_at | -9.165769 | Xyloglucan endotransglucosylase/hydrolase protein 15 | EB446175 |
| C11111_at | -9.055336 | GDSL esterase/lipase | DW004277 |
| C1616_at | -9.007623 | er lumen protein retaining receptor | DW003244 |
| C1341_at | -9.001483 | methylputrescine oxidase (MPO1) | DW004914 |

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|---------------|------------|---|----------|
| EB445696_at | -8.953097 | | EB445696 |
| C3578_at | -8.903918 | UDP-glycosyltransferase 91A1 | EB451401 |
| C1057_s_at | -8.850839 | Auxin-responsive protein | EB678508 |
| CV016014_x_at | -8.839208 | Putative PLA2 | CV016014 |
| TT17_F18_s_at | -8.787609 | probable galacturonosyltransferase-like 3-like | |
| CV019197_s_at | -8.699374 | | CV019197 |
| C2371_s_at | -8.698035 | Bidirectional sugar transporter SWEET11 | DV998924 |
| EB446875_at | -8.659117 | | EB446875 |
| DW002650_at | -8.598115 | sulfate transporter | DW002650 |
| C8871_at | -8.557277 | | CV016101 |
| DV999434_at | -8.542319 | polygalacturonase | DV999434 |
| C1580_at | -8.486959 | Lachrymatory-factor synthase precursor, putative | DW003495 |
| BP530783_at | -8.485515 | DVL5 | BP530783 |
| EB679741_at | -8.480179 | pectinesterase | EB679741 |
| EB684220_at | -8.269683 | serine-threonine kinase | EB684220 |
| T426_x_at | -8.265039 | berberine bridge enzyme-like protein | |
| EB444513_at | -8.218083 | Non-catalytic subunit of polygalacturonase | EB444513 |
| C10662_s_at | -8.168383 | ADP-ribosylation factor GTPase-activating protein | |
| EB425788_s_at | -8.156775 | | EB425788 |
| | | mrna inducible by salicylic acid or by tmv during systemic acquired | |
| CV019585_x_at | -7.9988065 | resistance | CV019585 |
| DW002408_at | -7.9776063 | acid phosphatase | DW002408 |
| EB444445_at | -7.936473 | purine permease | EB444445 |
| TT26_I23_s_at | -7.9262714 | Auxin-induced protein | |
| DV999427_at | -7.905743 | calmodulin | DV999427 |
| C9204_at | -7.896616 | phospholipase a2 | AB190178 |
| C5288_x_at | -7.8249807 | phospholipase a2 | EB439873 |
| | | heavy-metal-associated domain-containing protein copper chaperone- | |
| C4662_at | -7.819009 | related | EB444180 |

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|---------------|------------|---|----------|
| C2825_at | -7.801803 | lactoylglutathione lyase family protein glyoxalase i family protein | DV160370 |
| C5458_at | -7.7577496 | polygalacturonase isoenzyme | EB438772 |
| C1415_at | -7.7044377 | iron transporter-like protein | DW004494 |
| C7752_s_at | -7.578196 | aquaporin | BP131810 |
| AY032675_at | -7.528226 | peroxidase | AY032675 |
| C6490_at | -7.403977 | | EB427381 |
| AF211697_at | -7.3730097 | | AF211697 |
| C850_s_at | -7.367643 | | EB679635 |
| DV157701_at | -7.3303947 | extensin-like protein | DV157701 |
| C3390_at | -7.3083267 | thaumatin-like protein | DV157646 |
| GC437_at | -7.3059034 | | |
| TT34_N22_at | -7.30244 | Arabinogalactan protein 41 | |
| CV018410_at | -7.3000355 | Xyloglucan endotransglycosylase/hydrolase 16 protein | CV018410 |
| EB431781_at | -7.2700877 | | EB431781 |
| BP532655_at | -7.258082 | histone h2b | BP532655 |
| C4427_at | -7.221524 | peroxidase | EB446251 |
| BP130303_at | -7.2003074 | LRR receptor-like serine/threonine-protein kinase FLS2 | BP130303 |
| CV015963_s_at | -7.186631 | Thionin-like protein 2-like | CV015963 |
| C4650_at | -7.1563945 | Transcription factor ILR3 | EB444314 |
| BP532691_at | -7.15409 | Fasciclin-like arabinogalactan protein 2 | BP532691 |
| EB435250_at | -7.1267867 | | EB435250 |
| EB677664_at | -7.0328703 | | EB677664 |
| C8716_at | -7.0234427 | ---NA--- | CV018702 |
| DV160049_at | -6.9652295 | | DV160049 |
| C4493_at | -6.9527974 | Dehydration-responsive protein RD22 | EB445705 |
| EB429518_at | -6.9402275 | gcn5-related n-acetyltransferasefamily protein | EB429518 |
| TT27_P15_x_at | -6.9065423 | DVL11 | |
| EB444587_at | -6.895137 | apyrase | EB444587 |

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|---------------|------------|--|----------------|
| BP137042_x_at | -6.877676 | Probable methyltransferase PMT15 | BP137042 |
| DW001136_at | -6.767097 | | DW001136 |
| C3609_at | -6.725993 | Xyloglucan endotransglucosylase/hydrolase protein 9 | EB451243 |
| EB444345_at | -6.72487 | cytochrome p450 | EB444345 |
| C426_at | -6.715546 | Pollen Ole e 1 allergen and extensin family protein | EB681729 |
| X95932_at | -6.711866 | glutamine synthetase | X95932 |
| C10653_at | -6.6990137 | E3 ubiquitin-protein ligase | EB449998 |
| C136_at | -6.692654 | Putative PLA2 (F8) mRNA | EB683605 |
| C9040_s_at | -6.612073 | histone h2a | AJ718013 |
| EB435374_at | -6.596552 | | EB435374 |
| C4399_at | -6.581347 | | EB446559 |
| DW003943_at | -6.51141 | peroxidase | DW003943 |
| C4722_at | -6.4864225 | Polyphenol oxidase 5 mRNA | EB443535 |
| CV017220_at | -6.4770346 | Nicotiana tabacum putative PLA2 | CV017220 |
| DW003435_at | -6.4394197 | BEL1-like homeodomain protein 2-like (| DW003435 |
| C582_at | -6.4364457 | C2H2-like zinc finger protein | EB680899 |
| DV160871_at | -6.3638177 | casparian strip membrane protein | DV160871 |
| C153_at | -6.3596168 | | EB683511 |
| C11039_at | -6.341214 | protease inhibitor seed storage lipid transfer proteinfamily protein | DV159486 |
| EB679225_at | -6.3380713 | polygalacturonase | EB679225 |
| EB683711_at | -6.3362427 | BAG (Bcl-2-associated athanogene) | EB683711 |
| C10602_at | -6.320285 | RING-H2 finger protein ATL78-like | XM_004249816.1 |
| EB446635_at | -6.3134546 | | EB446635 |
| C3552_at | -6.27861 | Bidirectional sugar transporter SWEET1 | EB451539 |
| EB425593_at | -6.26966 | | EB425593 |
| EB449243_at | -6.2548556 | | EB449243 |
| DW004594_at | -6.249415 | | DW004594 |
| C9878_at | -6.2402844 | Cyclin-U2-2 | |

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|---------------|------------|--|----------|
| AJ344619_at | -6.235186 | | AJ344619 |
| TT31_N04_at | -6.222897 | | |
| DW004791_at | -6.1270695 | Probable methyltransferase PMT15 | DW004791 |
| CV021518_at | -6.103706 | | CV021518 |
| C10130_at | -6.0896497 | cysteine proteinase inhibitor b (cystatin b) | |
| EB445250_at | -6.0785055 | Ppc1 (Phosphoenolpyruvate carboxylase) | EB445250 |
| C3756_s_at | -6.028961 | | EB450500 |
| TT18_A15_at | -6.012175 | phy rapidly regulated 2 protein | |
| DV160404_at | -5.9813733 | dioxygenase | DV160404 |
| TT39_L01_s_at | -5.9627714 | ABA 8'-hydroxylase | |
| BP531664_at | -5.9615173 | Nuclear transcription factor Y subunit A-10-like | BP531664 |
| CV018410_x_at | -5.95563 | Xyloglucan endotransglycosylase/hydrolase 16 protein (XTH16) | CV018410 |
| C8778_s_at | -5.9439545 | ABA 8'-hydroxylase CYP707A1 mRNA | CV017759 |
| EB446986_s_at | -5.9090962 | | EB446986 |
| C9580_s_at | -5.8702035 | Arabinogalactan peptide 22-like | CV021808 |
| EB433512_at | -5.8578053 | | EB433512 |
| C9611_s_at | -5.844832 | Probable xyloglucan endotransglucosylase/hydrolase protein 8 | EB451452 |
| C3209_at | -5.831618 | Alpha-xylosidase | DV158466 |
| C5922_at | -5.8296156 | Aquaporin | EB431888 |
| EB684044_at | -5.82556 | Probable methyltransferase PMT15 | EB684044 |
| AJ632831_x_at | -5.8190155 | c-4 sterol methyl oxidase | AJ632831 |
| C3996_at | -5.7915974 | BURP domain-containing protein 3-like | EB449239 |
| C550_at | -5.781563 | O-fucosyltransferase family protein | EB681095 |
| C1715_at | -5.776968 | Polynucleotidyl transferase [Medicago truncatula] | DW002593 |
| EB679855_at | -5.7673593 | sulfate transporter | EB679855 |
| TT48_M08_at | -5.7480893 | | |
| C9580_at | -5.7259173 | arabinogalactan peptide | CV021808 |
| C4686_at | -5.717498 | polygalacturonase | EB443890 |

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|---------------|------------|---|------------|
| C9526_at | -5.713951 | Cyclin-U3-1 | EB424703 |
| C7090_at | -5.6951814 | | BP529282 |
| BP135928_s_at | -5.66522 | phospholipase a2 | BP135928 |
| DW002045_at | -5.658671 | | DW002045 |
| C3002_at | -5.639707 | cellulose synthase | DV159432 |
| BP532889_at | -5.6229873 | | BP532889 |
| C4699_at | -5.606486 | MLP-like protein 28 | EB443803 |
| DW003611_s_at | -5.601407 | Non-specific lipid-transfer protein 4 | DW003611 |
| C10765_at | -5.5871468 | serine carboxypeptidase ii | EB446366 |
| BP132480_at | -5.5757017 | reistance protein F variant 1.2 (SW5F) | BP132480 |
| C339_at | -5.5718617 | Ascorbate oxidase | EB682306 |
| DW003900_at | -5.5592537 | protein transport protein sec13 | DW003900 |
| C9859_at | -5.5347447 | Microsatellite A16 sequence | EB449085 |
| C84_at | -5.529529 | | EB683863 |
| TT05_F19_at | -5.5277786 | | |
| C11689_x_at | -5.5191846 | Berberine bridge enzyme like protein | AM851017.1 |
| C8905_at | -5.5044527 | aspartic proteinase nepenthesin | CN824923 |
| EB439329_s_at | -5.5019073 | SAUR-like auxin-responsive protein | EB439329 |
| C5292_at | -5.4321284 | early nodulin-like protein 18 | EB439830 |
| BP533566_at | -5.42591 | | BP533566 |
| BP532244_at | -5.421156 | | BP532244 |
| C8723_s_at | -5.4182096 | chitinase | CV018574 |
| BP533848_at | -5.4087873 | membrane-associated kinase regulator | BP533848 |
| C9724_at | -5.4036617 | Glucan endo-1,3-beta-glucosidase 4-like | BP527987 |
| EB445009_at | -5.3618565 | Glucuronoxylan 4-O-methyltransferase 3 | EB445009 |
| C4373_at | -5.354983 | GDSL esterase/lipase | EB446815 |
| CV019731_s_at | -5.3547025 | histone h2a | CV019731 |
| BP532414_at | -5.3430457 | extensin-like protein | BP532414 |

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|---------------|------------|---|----------|
| C3831_at | -5.3299785 | Arabinogalactan protein (Agp4) gen | EB450059 |
| C3063_at | -5.3131137 | auxin-responsive gh3 family protein | DV159167 |
| C2379_at | -5.306265 | sterol desaturase | DV998891 |
| TT11_C21_at | -5.294709 | histidine-containing phosphotransfer protein | |
| C6521_at | -5.277409 | | EB427221 |
| BP131544_at | -5.2537127 | | BP131544 |
| C1333_at | -5.2516675 | Non-specific lipid-transfer protein 4 | DW004961 |
| C1755_x_at | -5.2512994 | indoleacetic acid-induced-like protein | DW002357 |
| EB683068_at | -5.237468 | | EB683068 |
| EB443689_at | -5.235951 | MAPK mRNA for MAP kinase homolog | EB443669 |
| C4718_at | -5.2328568 | TERN mRNA for NAC-domain protein, | EB443598 |
| C1352_s_at | -5.2312703 | Fasciclin-like arabinogalactan protein 17 | DW004880 |
| EB445248_at | -5.1976824 | L-ascorbate oxidase | EB445248 |
| C8327_s_at | -5.182132 | Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin | BP532469 |
| C5123_at | -5.178499 | Aldose 1-epimerase | EB440905 |
| TT02_M21_at | -5.1691437 | 2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase | |
| C7199_at | -5.168456 | L-ascorbate oxidase | BP527758 |
| C4785_s_at | -5.1123066 | pectinesterase inhibitor | EB443203 |
| TT10_I02_at | -5.1060195 | transcription factor bHLH135-like | |
| C2919_at | -5.095321 | phosphatidylinositol-specific phospholipase c | DV159887 |
| AJ718952_s_at | -5.0602508 | | AJ718952 |
| BP134365_at | -5.060182 | methyl jasmonate esterase | BP134365 |
| C9428_at | -5.051056 | Auxin inducible protein | AF123504 |
| TT34_B15_at | -5.0377336 | Ntlim1 mRNA for transcription factor LIM | |