

Table S6. Groups of functionally related genes down-regulated in shoots of the *oas-a1* mutant when compared with wild type

Genes with a fold change (\log_2 [ratio between *oas-a1* shoots and wild type shoots]) lower than 0.5 and P value < 0.05 are shown in the table grouped by functional categories. Raw data can be found in the Supplemental material. The three genes with the lowest expression in the mutant are highlighted.

Functional category (Locus identifier)	Annotation	Fold change
Stress		
AT2G40750	WRKY family transcription factor, strongly induced by salicylic acid	0.30
AT3G22231		
	Pathogen and circadian controlled 1(PCC1), response to both virulent and avirulent strains of <i>Pseudomonas syringae</i> pv. Tomato, and response to fungus	0.30
AT1G65390	Disease resistance protein (TIR class), putative, domain signature TIR exists, suggestive of a disease resistance protein	0.35
AT1G72900	Disease resistance protein (TIR-NBS class), putative, domain signature TIR-NBS exists, suggestive of a disease resistance protein	0.36
AT1G72940	Disease resistance protein (TIR-NBS class), putative, domain signature TIR-NBS exists, suggestive of a disease resistance protein	0.39
AT4G16860	Disease resistance protein (TIR-NBS-LRR class), putative, domain signature TIR-NBS-LRR exists, suggestive of a disease resistance protein	0.41
AT1G66090	Disease resistance protein (TIR-NBS class), putative, domain signature TIR-NBS exists, suggestive of a disease resistance protein	0.42
AT4G02380		
	Late embryogenesis abundant 3 family protein / LEA3 family protein, similar to several small proteins induced by heat, auxin, ethylene and wounding	0.43
AT3G30775	Proline oxidase, mitochondrial / osmotic stress-responsive proline dehydrogenase (POX)	0.49
Oxidative stress-related		
AT5G57220	Cytochrome P450, putative, member of CYP81F, strongly induced by hydrogen peroxide	0.38
AT2G27690	Cytochrome P450, putative, member of CYP94C, jasmonic acid responsive	0.38
Hormone signaling and metabolism		
AT1G74670	Gibberellin-responsive protein, putative, similar Gibberellin-regulated protein 4 precursor	0.28
AT3G15210	Member of the ERF (ethylene response factor) subfamily B-1 of ERF/AP2 transcription factor family	0.32
AT3G21780	UDP-glucuronosyl/UDP-glucosyl transferase family protein	0.47
AT3G63110	Adenylate isopentenyltransferase 3 / cytokinin synthase (IPT3)	0.49
Development		
AT5G45890	Senescence-specific SAG12 protein (SAG12) / cysteine proteinase	0.16
AT3G54150	Embryo-abundant protein-related	0.35
AT1G55450	Embryo-abundant protein-related	0.46
Signaling		
AT1G73800	Calmodulin-binding protein	0.32

AT1G73805	Calmodulin-binding protein	0.39
AT1G73630	Calcium-binding protein, putative	0.41
AT4G04540	Protein kinase family protein	0.41
AT4G04570	Protein kinase family protein	0.41
AT1G56120	Leucine-rich repeat family protein	0.42
AT1G56130	Leucine-rich repeat family protein	0.42
AT1G56140	Leucine-rich repeat family protein	0.42
AT4G18250	Receptor serine/threonine kinase, putative	0.43
AT3G47480	Calcium-binding EF hand family protein	0.46
AT1G21270	Wall-associated kinase 2 (WAK2), response to salicylic acid stimulus	0.47
AT3G55950	Protein kinase family protein, similar to cytokinin-regulated kinase 1 (Nicotiana tabacum)	0.47
AT1G33600	Leucine-rich repeat family protein, LRR domains	0.47
AT1G51660	Mitogen-activated protein kinase kinase (MAPKK), identical to MAP kinase kinase 4	0.47
AT1G53430	Leucine-rich repeat family protein	0.48
AT4G02420	Lectin protein kinase, putative, similar to receptor lectin kinase 3	0.49
RNA		
AT4G25480	Member of the DREB subfamily A-1 of ERF/AP2 transcription factor family (CBF3)	0.24
AT3G56710	SigA-binding protein (SIB1)	0.37
AT5G65310	Homeobox-leucine zipper protein ATHB-5	0.37
AT3G11840	U-box domain-containing protein	0.40
AT2G46400	WRKY family transcription factor	0.42
AT2G38470	WRKY family transcription factor, defense response to bacterium and fungus	0.44
AT5G22570	WRKY family transcription factor	0.46
AT5G07100	WRKY family transcription factor (WRKY26)	0.48
Protein		
AT1G66940	Protein kinase-related	0.34
AT1G07430	Protein phosphatase 2C, putative	0.42
AT4G25110	Latex-abundant family protein (AMC2) / caspase family protein	0.45
AT2G01150	Zinc finger (C3HC4-type RING finger) family protein	0.46
AT5G27420	Zinc finger (C3HC4-type RING finger) family protein	0.49
CHO metabolism		
AT3G13750	Beta-galactosidase, putative / lactase, putative	0.32
AT3G47800	Aldose 1-epimerase family protein	0.43
Cell wall		
AT1G69530	Expansin (At-EXP1), alpha-expansin gene family	0.25
AT2G18660	Expansin family protein (EXPR3), identical to Expansin-related protein 3 precursor	0.29
AT2G26440	Pectinesterase family protein	0.40
AT4G23820	Glycoside hydrolase family 28 protein / polygalacturonase (pectinase) family protein	0.41

AT2G46330	Arabinogalactan-protein (AGP16)	0.44
AT5G57550	Xyloglucan:xyloglucosyl transferase / xyloglucan endotransglycosylase / endo-xyloglucan transferase (XTR3)	0.47
N-metabolism		
AT5G18170	Glutamate dehydrogenase 1 (GDH1)	0.41
S-assimilation		
AT4G21990	5'-Adenylylsulfate reductase, APS reductase 3 (APR3)	0.35
Cell		
AT3G52400	Syntaxin, putative (SYP122)	0.40
AT5G54610	Ankyrin repeat family protein	0.43
AT2G18290	Anaphase-promoting complex, subunit 10 family / APC10 family	0.49
DNA		
AT3G46030	Histone H2B, putative	0.39
Photosynthesis		
AT3G27690	Chlorophyll A-B binding protein (LHCB2:4)	0.33
Transport		
AT4G36670	Mannitol transporter, putative, major facilitator superfamily protein	0.15
AT3G23550	MATE efflux family protein, similar to ripening regulated protein DDTFR18, multidrug transport	0.17
AT3G62150	Multidrug resistant (MDR) ABC transporter, putative	0.44
AT1G19450	Integral membrane protein, putative / sugar transporter family protein	0.44
AT1G11260	Glucose transporter (STP1)	0.46
AT1G08930	Sugar transporter family protein / Early-responsive to dehydration stress protein (ERD6)	0.49
AT1G64170	Cation/hydrogen exchanger, putative, member of Putative Na ⁺ /H ⁺ antiporter family (ATCHX16)	0.49
Miscellaneous		
AT3G57240	Similar to glycosyl hydrolase family 17 protein, beta-1,3-glucanase 3	0.22
AT5G03350	Legume lectin family protein	0.25
AT1G21130	O-Methyltransferase, putative	0.37
AT3G14050	RelA/SpoT protein, putative (RSH2)	0.38
AT3G01290	Band 7 family protein, similar to hypersensitive-induced response protein (Zea mays)	0.39
AT1G17430	Hydrolase, alpha/beta fold family protein	0.42
AT2G30600	BTB/POZ domain-containing protein	0.43
AT3G47810	Homolog of yeast retromer subunit VPS29 involved in endosome to lysosome protein transport	0.43
AT2G35190	Novel plant SNARE 11 (NPSN11)	0.45
AT1G78270	UDP-glucose glucosyltransferase, putative	0.46
AT1G73480	Hydrolase, alpha/beta fold family protein	0.47
AT2G31990	Exostosin family protein	0.47
AT1G13210	Haloacid dehalogenase-like hydrolase family protein	0.48
AT3G62780	C2 domain-containing protein	0.48
Not assigned		

AT2G14560	Expressed protein	0.33
AT2G30010	Expressed protein	0.34
AT3G44450	Expressed protein	0.35
AT1G78410	VQ motif-containing protein	0.36
AT5G05300	Expressed protein	0.36
AT3G46110	Expressed protein	0.37
AT2G36220	Expressed protein	0.42
AT2G42040	Expressed protein	0.42
AT3G27770	Expressed protein	0.42
AT3G04640	Glycine-rich protein	0.45
AT1G17665	Expressed protein	0.46
AT2G28400	Expressed protein	0.46
AT4G34260	Expressed protein	0.47
AT3G22240	Expressed protein	0.47
AT1G48330	Expressed protein	0.47
AT1G74440	Expressed protein, similar to YGL010w-like protein	0.48
AT2G34510	Expressed protein	0.49
AT1G75180	Expressed protein	0.50
AT1G11210	Expressed protein, contains similarity to cotton fiber expressed protein 1	0.50
