

**Table - List of transcripts from *A. thaliana* , which have in the past been reported as connected to abiotic stress responses.**

<b>Name/EST</b>	<b>Description</b>	<b>Category</b>	<b>Subcategory</b>	<b>Authors</b>	<b>Reference</b>
AtCBL1	calcineurin B-like protein 1	Cell growth, division & DNA synthesis	Cell growth	Kudla, J. et al.	Proc Natl Acad Sci U S A. 96 (8), 4718-23 (1999)
CBL2	calcineurin B-like protein 2	Cell growth, division & DNA synthesis	Cell growth	Kudla, J. et al.	Proc Natl Acad Sci U S A. 96 (8), 4718-23 (1999)
CBL3	calcineurin B-like protein 3	Cell growth, division & DNA synthesis	Cell growth	Kudla, J. et al.	Proc Natl Acad Sci U S A. 96 (8), 4718-23 (1999)
STO	putative zinc-finger protein	Cell growth, division & DNA synthesis	Cell growth	Lippuner, V. et al.	J. Biol. Chem. 271 (22), 12859-12866 (1996)
STZ	salt-tolerance zinc finger protein	Cell growth, division & DNA synthesis	Cell growth	Lippuner, V. et al.	J. Biol. Chem. 271 (22), 12859-12866 (1996)
His1-3	histone H1-3	Cell growth, division & DNA synthesis	Stress response	Ascenzi, R. & Gantt, J.S.	Plant Mol Biol. 34 (4), 629-41 (1997)
His1-3	histone H1-3	Cell growth, division & DNA synthesis	Stress response	Ascenzi, R. & Gantt, J.S.	Plant Mol Biol. 34 (4), 629-41 (1997)
pOxy5	annexin-like protein	Cell rescue, defense, cell death & ageing	Detoxification	Gidrol, X. et al.	Proc Natl Acad Sci U S A. 93 (20), 11268-73 (1996)
GTS	glutathione S-transferase	Cell rescue, defense, cell death & ageing	Detoxification	van der Kop, D.A. et al.	Plant Mol. Biol. 30 (4), 839-844 (1996)
GST	glutathione transferase	Cell rescue, defense, cell death & ageing	Detoxification	Bartling, D. et al.	Eur. J. Biochem. 216 (2), 579-586 (1993)
gst10b	glutathione transferase	Cell rescue, defense, cell death & ageing	Detoxification	Dixon, D.P. et al.	Plant Physiol. 119, 1568-1568 (1999)
AtGST 10	glutathione transferase	Cell rescue, defense, cell death & ageing	Detoxification	Dixon, D.P. et al.	Plant Physiol. 119, 1568-1568 (1999)
APX1	ascorbate peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Kubo, A. et al.	FEBS Lett. 315 (3), 313-317 (1993)
APX	ascorbate peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Jespersen, H.M. et al.	Biochem. J. 326 (Pt 2), 305-310 (1997)
Apx1b	ascorbate peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Santos, M. et al.	Planta 198 (1), 64-69 (1996)
L-APX	ascorbate peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Kubo, A. et al.	Plant Mol. Biol. 18 (4), 691-701 (1992)
APX3	ascorbate peroxidase 3	Cell rescue, defense, cell death & ageing	Radical scavenging	Zhang, H. et al.	Plant Mol. Biol. 34 (6), 967-971 (1997)
APX2	ascorbate peroxidase, cytosolic	Cell rescue, defense, cell death & ageing	Radical scavenging	Karpinski, S. et al.	Plant Cell 9 (4), 627-640 (1997)
APX3	ascorbate peroxidase, extraplasmid	Cell rescue, defense, cell death & ageing	Radical scavenging	Karpinski, S. et al.	Plant Cell 9 (4), 627-640 (1997)
cat	catalase	Cell rescue, defense, cell death & ageing	Radical scavenging	Zentgraf, U. & Zinkernagel, I.	Plant Physiol. 110, 1047-1047 (1996)
CAT	catalase	Cell rescue, defense, cell death & ageing	Radical scavenging	Chevalier, C.	Plant Physiol. 99, 1726-1728 (1993)

CAT1	catalase 1	Cell rescue, defense, cell death & ageing	Radical scavenging	Frugoli, J.A. et al.	Plant Physiol. 112 (1), 327-36 (1996)
CAT3	catalase 3	Cell rescue, defense, cell death & ageing	Radical scavenging	Zhong, H.H. & McClung, C.R.	Mol. Gen. Genet. 251 (2), 196-203 (1996)
SEN2	catalase 3	Cell rescue, defense, cell death & ageing	Radical scavenging	Park, J.H.	Plant Mol. Biol. 37 (3), 445-454 (1998)
Gpx2	cytosolic glutathione peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Mullineaux, P.M. et al.	Plant J. 13 (3), 375-379 (1998)
GPX1	glutathione peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Mullineaux, P.M. et al.	Plant J. 13 (3), 375-379 (1998)
GPX	glutathione peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Bilodeau, P. et al.	Plant Physiol. 116, 1193 (1998)
GR	glutathione reductase	Cell rescue, defense, cell death & ageing	Radical scavenging	Kubo, A. et al.	Plant Cell Physiol. 34, 1259-1266 (1993)
GR	glutathione reductase	Cell rescue, defense, cell death & ageing	Radical scavenging	Loebler, M.	Plant Physiol. 111, 1353 (1996)
PHGPX	Putative phospholipid hydroperoxide glutathione peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Sugimoto, M. & Sakamoto, W.	Genes Genet Syst. 72 (5), 311-6 (1997)
S-APX	stromal ascorbate peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Jespersen, H.M. et al.	Biochem. J. 326 (Pt 2), 305-310 (1997)
TB-APX	thylakoid-bound ascorbate peroxidase	Cell rescue, defense, cell death & ageing	Radical scavenging	Jespersen, H.M. et al.	Biochem. J. 326 (Pt 2), 305-310 (1997)
CDPK2	calcium-dependent protein kinase	Cell rescue, defense, cell death & ageing	Stress response	Urao, T. et al.	Mol Gen Genet. 244 (4), 331-40 (1994)
CDPK1	calcium-dependent protein kinase	Cell rescue, defense, cell death & ageing	Stress response	Urao, T. et al.	Mol Gen Genet. 244 (4), 331-40 (1994)
CDPK3	calcium-dependent protein kinase	Cell rescue, defense, cell death & ageing	Stress response	Urao, T. et al.	Plant Physiol. 105 (4), 1461-2 (1994)
Cor15a	cold regulated	Cell rescue, defense, cell death & ageing	Stress response	Baker, S.S. et al.	Plant Mol Biol. 24 (5), 701-13 (1994)
Cor15b	cold regulated	Cell rescue, defense, cell death & ageing	Stress response	Wilhelm, K.S., Thomashow, M.F.	Plant Mol Biol. 23 (5), 1073-7 (1993)
cor47	cold-regulated gene	Cell rescue, defense, cell death & ageing	Stress response	Gilmour, S. J. et al.	Plant Mol Biol. 18(1), 13-21(1992)
cor6.6	cold-regulated gene KIN1 protein homology	Cell rescue, defense, cell death & ageing	Stress response	Gilmour, S. J. et al.	Plant Mol Biol. 18(1), 13-21(1992)
rd22BP1	dehydration responsive gene	Cell rescue, defense, cell death & ageing	Stress response	Abe, H. et al.	Plant Cell. 9 (10), 1859-68 (1997)
ERD15	dehydration-induced gene	Cell Rescue, defense, cell death & ageing	Stress response	Kiyosue, T. et al.	Plant Physiol. 106 (4), 1707 (1994)

ERD10	dehydrin - respond rapidly to dehydration stress	Cell rescue, defense, cell death & ageing	Stress response	Kiyosue, T. et al.	Plant Cell Physiol. 35 (2), 225-31 (1994)
ERD14	dehydrin - respond rapidly to dehydration stress	Cell rescue, defense, cell death & ageing	Stress response	Kiyosue, T. et al.	Plant Cell Physiol. 35 (2), 225-31 (1994)
DhnX	dehydrin (Xero 2)	Cell rescue, defense, cell death & ageing	Stress response	Welin, B.V. et al.	Plant Mol Biol. 26 (1), 131-44 (1994)
RD29	desiccation-responsive	Cell Rescue, defense, cell death & ageing	Stress response	Yamaguchi-Shinozaki, K. & Shinozaki, K.	Plant Physiol. 101 (3), 1119-20 (1993)
Di19	Drought-induced protein Di19	Cell rescue, defense, cell death & ageing	Stress response	Gosti, F. et al.	Mol Gen Genet. 246 (1), 10-8 (1995)
RD22	homology with USP from <i>V. faba</i>	Cell Rescue, defense, cell death & ageing	Stress response	Yamaguchi-Shinozaki, K. & Shinozaki, K.	Mol Gen Genet. 238 (1-2), 17-25 (1993)
RCI2A	hydrophobic protein	Cell rescue, defense, cell death & ageing	Stress response	Capel, J. et al.	Plant Physiol. 115 (2), 569-76 (1997)
RCI2B	hydrophobic protein	Cell rescue, defense, cell death & ageing	Stress response	Capel, J. et al.	Plant Physiol. 115 (2), 569-76 (1997)
Rab18	induced by ABA and cold	Cell rescue, defense, cell death & ageing	Stress response	Lang, V. & Palva, E.T.	Plant Mol Biol. 20 (5), 951-62 (1992)
Lti65	low-temperature-induced	Cell rescue, defense, cell death & ageing	Stress response	Nordin, K. et al.	Plant Mol Biol. 21 (4), 641-53 (1993)
Lti78	low-temperature-induced	Cell rescue, defense, cell death & ageing	Stress response	Nordin, K. et al.	Plant Mol Biol. 21 (4), 641-53 (1993)
Lti140	low-temperature-induced	Cell rescue, defense, cell death & ageing	Stress response	Nordin, K. et al.	Plant Mol Biol. 16 (6), 1061-71 (1991)
Kin1	low-temperature-induced	Cell rescue, defense, cell death & ageing	Stress response	Kurkela, S. & Franck, M.	Plant Mol Biol. 15 (1), 137-44 (1990)
Lti45	low-temperature-induced	Cell rescue, defense, cell death & ageing	Stress response	Welin, B.V. et al.	Plant Mol Biol. 26 (1), 131-44 (1994)
Lti30	low-temperature-induced	Cell rescue, defense, cell death & ageing	Stress response	Welin, B.V. et al.	Plant Mol Biol. 26 (1), 131-44 (1994)
Cor47	low-temperature-induced	Cell rescue, defense, cell death & ageing	Stress response	Welin, B.V. et al.	Plant Mol Biol. 29 (2), 391-5 (1995)
AtHAL3a	similar to <i>Saccharomyces cerevisiae</i> HAL3	Cell rescue, defense, cell death & ageing	Stress response	Espinosa-Ruiz, A. et al.	Plant J. 20 (5), 529-39 (1999)
AtHAL3b	similar to <i>Saccharomyces cerevisiae</i> HAL3	Cell rescue, defense, cell death & ageing	Stress response	Espinosa-Ruiz, A. et al.	Plant J. 20 (5), 529-39 (1999)
ATsEH	soluble epoxide hydrolase	Cell rescue, defense, cell death & ageing	Stress response	Kiyosue, T. et al.	Plant J. 6 (2), 259-69 (1994)
CCH	copper homeostasis factor	Ion homeostasis	Homeostasis of metal ions	Himelblau, E. et al.	Plant Physiol. 117 (4), 1227-1234 (1998)

SAL1	3'(2'),5'-bisphosphate nucleotidase	Metabolism	Amino-acid biosynthesis	Quintero, F.J. et al.	Plant Cell 8 (3), 529-537 (1996)
OASTL	cytosolic O-acetylserine(thiol)lyase	Metabolism	Amino-acid biosynthesis	Barroso, C. et al.	FEBS Lett. 363 (1-2), 1-5 (1995)
hal2 like	HAL2-like protein (Ahl)	Metabolism	Amino-acid biosynthesis	Cheong, J. J. et al.	Plant Physiol. 111, 652 (1996)
AtPDH	osmotic stress-induced proline dehydrogenase	Metabolism	Amino-acid biosynthesis	Peng, Z. et al.	Mol Gen Genet. 253 (3), 334-41 (1996)
erd5	proline dehydrogenase	Metabolism	Amino-acid biosynthesis	Nakashima, K. et al.	Plant Physiol. 118 (4), 1233-41 (1998)
pox	proline oxidase	Metabolism	Amino-acid biosynthesis	Verbruggen, N. et al.	Proc. Natl. Acad. Sci. U.S.A. 93 (16), 8787-8791 (1996)
At P5C1	pyrroline carboxylate reductase	Metabolism	Amino-acid biosynthesis	Verbruggen, N. et al.	Plant Physiol. 103 (3), 771-81 (1993)
At-P5S	pyrroline-5-carboxylate synthetase	Metabolism	Amino-acid biosynthesis	Savoure, A. et al.	FEBS Lett. 372 (1), 13-9 (1995)
p5csA	pyrroline-5-carboxylate synthetase A	Metabolism	Amino-acid biosynthesis	Strizhov, N. et al.	Plant J. 12 (3), 557-69 (1997)
p5csB	pyrroline-5-carboxylate synthetase B	Metabolism	Amino-acid biosynthesis	Strizhov, N. et al.	Plant J. 12 (3), 557-69 (1997)
ADH	alcohol dehydrogenase	Metabolism	C-compound and carbohydrate metabolism	de Bruxelles, G. L. et al.	Plant Physiol. 11 (2), 381-9 (1996)
Inps1	myo inositol 1-phosphate synthase	Metabolism	C-compound and carbohydrate metabolism	Ishitani, M. et al.	Plant J. 9 (4), 537-48 (1996)
mifs	myo-inositol 1-phosphate synthase	Metabolism	C-compound and carbohydrate metabolism	Johnson, M.D.	Plant Physiol. 105 (3), 1023-1024 (1994)
AtTPPB	trehalose-6-phosphate phosphatase	Metabolism	C-compound and carbohydrate metabolism	Vogel, G. et al.	Plant J. 13 (5), 673-683 (1998)
AtTPPA	trehalose-6-phosphate phosphatase	Metabolism	C-compound and carbohydrate metabolism	Vogel, G. et al.	Plant J. 13 (5), 673-683 (1998)
TPS1	trehalose-6-phosphate synthase	Metabolism	C-compound and carbohydrate metabolism	Gancedo, C.	Plant J. 1998 Mar;13(5):685-9.
UDP-glucose epimerase	uridine diphosphate glucose epimerase	Metabolism	C-compound and carbohydrate metabolism	Dormann, P. & Benning, C.	Arch Biochem Biophys. 327 (1), 27-34 (1996)
ARGdc	arginine decarboxylase	Metabolism	Secondary metabolism	Watson, M.B. & Malmberg, R.L.	Plant Physiol. 111 (4), 1077-1083 (1996)
cer1	CER1 protein	Metabolism	Secondary metabolism	Aarts, M.G. et al.	Plant Cell 7 (12), 2115-27 (1995)
Crt3	calreticulin (chaperone)	Protein destination	Protein folding and stabilization	Nelson, D.E. et al.	Plant Physiol. 114 (1), 29-37 (1997)
Crt2	calreticulin (chaperone)	Protein destination	Protein folding and stabilization	Nelson, D.E. et al.	Plant Physiol. 114 (1), 29-37 (1997)
Crt1	calreticulin (chaperone)	Protein destination	Protein folding and stabilization	Nelson, D.E. et al.	Plant Physiol. 114 (1), 29-37 (1997)

atj	chaperone protein	Protein destination	Protein folding folding and stabilization	Zhou, R. et al.	Plant Physiol. 108 (2), 821-822 (1995)
HSP21	chloroplast heat shock protein	Protein destination	Protein folding folding and stabilization	Chen, Q. & Verling, E.	Mol. Gen. Genet. 226 (3), 425-431 (1991)
AtJ3	DnaJ homolog	Protein destination	Protein folding folding and stabilization	Zhou, R. et al.	Plant Physiol. 122 (1), 291 (2000)
atj	DnaJ homolog	Protein destination	Protein folding folding and stabilization	Zhou, R. et al.	Plant Physiol. 121 (3), 1053-1054 (1999)
AtJ1	DnaJ homolog	Protein destination	Protein folding folding and stabilization	Kroczyńska, B. et al.	Plant Mol. Biol. 31 (3), 619-629 (1996)
J20	DnaJ-like protein (J20) J20 type III	Protein destination	Protein folding folding and stabilization	Miernyk, J.A. & Coop, N.E.	Plant Physiol. 122 (2), 620 (2000)
AtHSP22.0	endomembrane-localized small heatshock protein	Protein destination	Protein folding folding and stabilization	Helm, K.W. et al.	Mol Cell Biol. 13 (1), 238-47 (1993)
hsc70	heat shock cognate protein	Protein destination	Protein folding folding and stabilization	Wu, S.H. et al.	Plant Mol. Biol. 25 (3), 577-583 (1994)
Athsp101	heat shock protein 101	Protein destination	Protein folding folding and stabilization	Schirmer, E.C. et al.	Plant Cell 6 (12), 1899-1909 (1994)
hsp17.4	heat shock protein 17.4	Protein destination	Protein folding folding and stabilization	Takahashi, T. & Komeda, Y.	Mol. Gen. Genet. 219 (3), 365-372 (1989)
hsp17.6	heat shock protein 17.6	Protein destination	Protein folding folding and stabilization	Helm, K.W. & Vierling, E.	Nucleic Acids Res. 17 (19), 7995 (1989)
hsp17.6-II	heat shock protein 17.6 - II	Protein destination	Protein folding folding and stabilization	Bartling, D. et al.	Plant Mol. Biol. 18 (5), 1007-1008 (1992)
hsp17.6A	heat shock protein 17.6A	Protein destination	Protein folding folding and stabilization	Prandl, R. et al.	Mol. Gen. Genet. 258 (3), 269-278 (1998)
HSP18.2	heat shock protein 18.2	Protein destination	Protein folding folding and stabilization	Takahashi, T. & Komeda, Y.	Mol. Gen. Genet. 219 (3), 365-372 (1989)
HSP70-1	heat shock protein 70-1	Protein destination	Protein folding folding and stabilization	Wu, C.H. et al.	Plant Physiol. 88, 731-740 (1988)
HSP70-1	heat shock protein 70-1	Protein destination	Protein folding folding and stabilization	Wu, C.H. et al.	Plant Physiol. 88, 731-740 (1988)
HSP70-2	heat shock protein 70-2	Protein destination	Protein folding folding and stabilization	Wu, C.H. et al.	Plant Physiol. 88, 731-740 (1988)
HSP70-3	heat shock protein 70-3	Protein destination	Protein folding folding and stabilization	Wu, C.H. et al.	Plant Physiol. 88, 731-740 (1988)
hsp81.2	heat shock protein 81.2	Protein destination	Protein folding folding and stabilization	Milioni, D. & Hatzopoulos, P.	Plant Mol. Biol. 35 (6), 955-961 (1997)
hsp81.4	heat shock protein 81.4	Protein destination	Protein folding folding and stabilization	Milioni, D. & Hatzopoulos, P.	Plant Mol. Biol. 35 (6), 955-961 (1997)

hsp83	heat shock protein 83	Protein destination	Protein folding and stabilization	Conner, T.W. et al.	Plant Physiol. 94, 1689-1695 (1990)
hsp88.1	heat shock protein 88.1	Protein destination	Protein folding and stabilization	Milioni, D. & Hatzopoulos, P.	Plant Mol. Biol. 35 (6), 955-961 (1997)
hsp90A	heat shock protein 90A	Protein destination	Protein folding and stabilization	Milioni, D. & Hatzopoulos, P.	Plant Mol. Biol. 35 (6), 955-961 (1997)
Hsp110/SSE1-subfamily	heat-shock protein 110	Protein destination	Protein folding and stabilization	Storozhenko, S. et al.	FEBS Lett. 390 (1), 113-8 (1996)
hsp21	heatshock protein 21	Protein destination	Protein folding and stabilization	Osteryoung, K.W. et al.	Mol. Gen. Genet. 239, 323-333 (1993)
HSP81-3	heat-shock protein 81-3	Protein destination	Protein folding and stabilization	Yabe, N. et al.	Plant Cell Physiol. 35 (8), 1207-1219 (1994)
LMW Hsp	LMW heat shock protein	Protein destination	Protein folding and stabilization	Visioli, G. et al.	Plant Mol. Biol. 34 (3), 517-527 (1997)
LMW Hsp	mitochondrial LMW heat shock protein	Protein destination	Protein folding and stabilization	Visioli, G. et al.	Plant Mol. Biol. 34 (3), 517-527 (1997)
AtHSP23.6-mito	mitochondrial protein	Protein destination	Protein folding and stabilization	Willett, D.A. et al.	Plant Physiol. 112, 1399 (1996)
ERD1	similar to the regulatory ATPase subunit (ClpA) of Clp protease	Protein destination	Proteolysis	Nakashima, K. et al.	Plant J. 12 (4), 851-61 (1997)
RD21A	thiol protease	Protein destination	Proteolysis	Koizumi, M. et al.	Gene. 129 (2), 175-82 (1993)
RD19A	thiol protease	Protein destination	Proteolysis	Koizumi, M. et al.	Gene. 129 (2), 175-82 (1993)
P5CS1	delta1-pyrroline-5-carboxylate synthetase	Signal transduction	Intracellular communication	Yoshiba, Y. et al.	Plant J. 7 (5), 751-60 (1995)
GSK3	GSK3/shaggy-like protein kinase	Signal transduction	Intracellular communication	Piao, H. L. et al.	Plant Physiol. 119 (4), 1527-34 (1999)
ATMPK1	MAP (mitogen-activated protein) kinase	Signal transduction	Intracellular communication	Mizoguchi, T. et al.	Plant J. 5 (1), 111-22 (1994)
ATMPK3	MAP kinase	Signal transduction	Intracellular communication	Mizoguchi, T. et al.	FEBS Lett. 336 (3), 440-4 (1993)
ATMKK5	MAP kinase kinase	Signal transduction	Intracellular communication	Ichimura, K. et al.	Biochem. Biophys. Res. Commun. 253 (2), 532-543 (1998)
ATMKK4	MAP kinase kinase	Signal transduction	Intracellular communication	Ichimura, K. et al.	Biochem. Biophys. Res. Commun. 253 (2), 532-543 (1998)
ATMKK3	MAP kinase kinase	Signal transduction	Intracellular communication	Ichimura, K. et al.	Biochem. Biophys. Res. Commun. 253 (2), 532-543 (1998)
ATMKK2	MAP kinase kinase	Signal transduction	Intracellular communication	Ichimura, K. et al.	Biochem. Biophys. Res. Commun. 253 (2), 532-543 (1998)
ATMEKK1	mitogen-activated protein kinase	Signal transduction	Intracellular communication	Mizoguchi, T. et al.	Proc Natl Acad Sci U S A. 93 (2), 765-9 (1996)
PIP5K	phosphatidylinositol-4-phosphate 5-kinase	Signal transduction	Intracellular communication	Mikami, K. et al.	Plant J. 15 (4), 563-8 (1998)

PI-PLC	phosphoinositide specific phospholipase C	Signal transduction	Intracellular communication	Hirayama, T. et al.	Proc Natl Acad Sci U S A. 92 (9), 3903-7 (1995)
RPK1	protein kinase	Signal transduction	Intracellular communication	Hong, S.W. et al.	Plant Physiol. 113 (4), 1203-12 (1997)
AtPTP1	protein tyrosine phosphatase 1	Signal transduction	Intracellular communication	Xu, Q. et al.	Plant Cell. 10 (5), 849-57 (1998)
P5CS2	pyrroline-5-carboxylate synthetase	Signal transduction	Intracellular communication	Strizhov, N. et al.	Plant J. 12 (3), 557-69 (1997)
ATPK19	ribosomal-protein S6 kinase homolog	Signal transduction	Intracellular communication	Mizoguchi, T. et al.	FEBS Lett. 358 (2), 199-204 (1995)
ATPK6	ribosomal-protein S6 kinase homolog	Signal transduction	Intracellular communication	Mizoguchi, T. et al.	FEBS Lett. 358 (2), 199-204 (1995)
Ser/Thr PP	Ser/Thr protein phosphatase	Signal transduction	Intracellular communication	Casamayor, A. et al.	Plant Mol Biol. 26(1), 523-8(1994)
ARSK1	serine/threonine protein kinase	Signal transduction	Intracellular communication	Hwang, I. & Goodman, H. M.	Plant J. 8 (1), 37-43 (1995)
SOS2	serine/threonine protein kinase	Signal transduction	Intracellular communication	Liu, J. et al.	Proc Natl Acad Sci U S A. 97 (7), 3730-4 (2000)
Atpk7	serine/threonine protein kinase	Signal transduction	Intracellular communication	Hayashida, N. et al.	Gene. 121 (2), 325-30 (1992)
ARA.KIN	serine/threonine kinase	Signal transduction	Key kinase	Covic, L. & Lew, R.R.	Biochim Biophys Acta. 1305 (3), 125-9 (1996)
ABI1	gene for ABI1 protein	Signal transduction	Key phosphatase	Leung, J. et al.	Science. 264(5164), 1448-52(1994)
ABI2	gene for ABI2 protein	Signal transduction	Key phosphatase	Leung, J. et al.	Plant Cell 9 (5), 759-771 (1997)
RR4	responce reactor4	Signal transduction	Other signal-transduction activities	Urao, T. et al.	FEBS Lett. 427 (2), 175-8 (1998)
ATRR1	responce regulator1	Signal transduction	Other signal-transduction activities	Urao, T. et al.	FEBS Lett. 427 (2), 175-8 (1998)
SOS3	calcium sensor homolog	Signal transduction	Receptor protein	Liu, J. & Zhu, J.K.	Science 280 (5371), 1942-1945 (1998)
PR5K	putative receptor serine/threonine kinase	Signal transduction	Receptor protein	Wang, X. et al.	Proc Natl Acad Sci U S A. 93 (6), 2598-602 (1996)
EFA27	Ca(2+)-binding protein	Signal transduction	Second messengers	Frandsen, G. et al.	J Biol Chem. 271 (1), 343-8 (1996)
AtCP1	NaCl-inducible Ca <sup>2+</sup> -binding protein	Signal transduction	Second messengers	Jang, H. J. et al.	Plant Mol Biol. 37 (5), 839-47 (1998)
ACP5	acid phosphatase type 5	Signal transduction	Stress response	del Pozo, J.C. et al.	Plant J. 19 (5), 579-89 (1999)
DsPTP1	dual specificity protein phosphatase	Signal transduction	Stress response	Gupta, R. et al.	Plant J. 16 (5), 581-589 (1998)
MEK1	homologue of MAP kinase kinase	Signal transduction	Stress response	Morris, P.C. et al.	Plant Mol. Biol. 35 (6), 1057-1064 (1997)
RCI1 (RCI1A)	homology to 14-3-3 proteins putative kinase regulators	Signal transduction	Stress response	Jarillo, J.A. et al.	Plant Mol Biol. 25 (4), 693-704 (1994)
RCI2 (RCI1B)	homology to 14-3-3 proteins putative kinase regulators	Signal transduction	Stress response	Jarillo, J.A. et al.	Plant Mol Biol. 25 (4), 693-704 (1994)
ANP1	NPK1-related protein kinase 1L	Signal transduction	Stress response	Nishihama, R. et al.	Plant J. 12 (1), 39-48 (1997)
ANP1	NPK1-related protein kinase 1S	Signal transduction	Stress response	Nishihama, R. et al.	Plant J. 12 (1), 39-48 (1997)
ANP2	NPK1-related protein kinase 2	Signal transduction	Stress response	Nishihama, R. et al.	Plant J. 12 (1), 39-48 (1997)

ANP3	NPK1-related protein kinase 3	Signal transduction	Stress response	Nishihama, R. et al.	Plant J. 12 (1), 39-48 (1997)
RR2	responce reactor2	Signal transduction	Stress response	Urao, T. et al.	FEBS Lett. 427 (2), 175-8 (1998)
ATRR3	responce reactor3	Signal transduction	Stress response	Urao, T. et al.	FEBS Lett. 427 (2), 175-8 (1998)
ABI3 gene	abscisic acid insensitive gene	Transcription	Transcriptional control	Giraudat, J. et al.	Plant Cell 4 (10), 1251-1261 (1992)
ABF-1	abscisic acid responsive elements-binding factor	Transcription	Transcriptional control	Choi, H. et al.	J. Biol. Chem. 275 (3), 1723-1730 (2000)
ABF-2	abscisic acid responsive elements-binding factor	Transcription	Transcriptional control	Choi, H. et al.	J. Biol. Chem. 275 (3), 1723-1730 (2000)
ABF-3	abscisic acid responsive elements-binding factor	Transcription	Transcriptional control	Choi, H. et al.	J. Biol. Chem. 275 (3), 1723-1730 (2000)
ABF-4	abscisic acid responsive elements-binding factor	Transcription	Transcriptional control	Choi, H. et al.	J. Biol. Chem. 275 (3), 1723-1730 (2000)
CBF1	CRT/CRE binding factor 1	Transcription	Transcriptional control	Gilmour, S.J. et al.	Plant J. 16 (4), 433-442 (1998)
ATHB6	homeobox-leucine zipper protein	Transcription	Transcriptional control	Soderman, E. et al.	Plant Mol Biol. 40 (6), 1073-83 (1999)
ATHB12	homeobox-leucine zipper protein	Transcription	Transcriptional control	Lee, Y.H. & Chun, J.Y.	Plant Mol Biol. 37 (2), 377-84 (1998)
ATHB-7	homeodomain leucine-zipper protein	Transcription	Transcriptional control	Soderman, E. et al.	Plant Mol Biol. 26 (1), 145-54 (1994)
AtMYB2	myb homolog	Transcription	Transcriptional control	Urao, T. et al.	Plant Cell. 5 (11), 1529-39 (1993)
DREB1A	transcription factors	Transcription	Transcriptional control	Liu, Q. et al.	Plant Cell. 10 (8), 1391-406 (1998)
DREB2A	transcription factors	Transcription	Transcriptional control	Liu, Q. et al.	Plant Cell. 10 (8), 1391-406 (1998)
DREB1B	transcription factors	Transcription	Transcriptional control	Liu, Q. et al.	Plant Cell. 10 (8), 1391-406 (1998)
DREB1C	transcription factors	Transcription	Transcriptional control	Liu, Q. et al.	Plant Cell. 10 (8), 1391-406 (1998)
DREB2B	transcription factors	Transcription	Transcriptional control	Liu, Q. et al.	Plant Cell. 10 (8), 1391-406 (1998)
CBF3	transcriptional activator	Transcription	Transcriptional control	Medina, J. et al.	Plant Physiol. 119 (2), 463-70 (1999)
CBF2	transcriptional activator	Transcription	Transcriptional control	Medina, J. et al.	Plant Physiol. 119 (2), 463-70 (1999)
CBF1	transcriptional activator CBF1	Transcription	Transcriptional control	Stockinger, E.J. et al.	Proc. Natl. Acad. Sci. U.S.A. 94 (3), 1035-1040 (1997)
AAP2	amino acid permease	Transport facilitation	Amino-acid transporters	Kwart, M. et al.	Plant J. 4 (6), 993-1002 (1993)
AAP6	amino acid permease 6	Transport facilitation	Amino-acid transporters	Rentsch, D. et al.	Plant Cell 8 (8), 1437-1446 (1996)
AAP4	amino acid transporter	Transport facilitation	Amino-acid transporters	Fischer, W.N. et al.	J. Biol. Chem. 270 (27), 16315-16320 (1995)
AAT1	amino acid transporter	Transport facilitation	Amino-acid transporters	Frommer, W.B. et al.	Proc. Natl. Acad. Sci. U.S.A. 92 (26), 12036-12040 (1995)
AAT	amino acid transporter	Transport facilitation	Amino-acid transporters	Hsu, L.-C. et al.	Proc. Natl. Acad. Sci. U.S.A. 90, 7441-7445 (1993)
LHT1	lysine and histidine specific transporter	Transport facilitation	Amino-acid transporters	Chen, L. & Bush, D.R.	Plant Physiol. 115 (3), 1127-1134 (1997)
ProT1	proline transporter 1	Transport facilitation	Amino-acid transporters	Rentsch, D. et al.	Plant Cell 8 (8), 1437-1446 (1996)

ProT2	proline transporter 2	Transport facilitation	Amino-acid transporters	Rentsch, D. et al.	Plant Cell. 8 (8), 1437-46 (1996)
cngc5	cyclic calmodulin-regulated ion channel	Transport facilitation	Ion transporter	Kohler, C.	Plant J. 18 (1), 97-104 (1999)
PEA1	envelope Ca <sup>2+</sup> -ATPase (PEA1)	Transport facilitation	Ion transporter	Huang, L. et al.	Proc. Natl. Acad. Sci. U.S.A. 90, 10066-10070 (1993)
NHX1	Na <sup>+</sup> /H <sup>+</sup> exchanger	Transport facilitation	Ion transporter	Quintero, F.J. et al.	FEBS Lett. 471 (2-3), 224-228 (2000)
NTL1 (AtNRT1)	nitrate transporter NTL1	Transport facilitation	Ion transporter	Huang, N. C. et al.	Plant Cell. 11 (8), 1381-92 (1999)
KCO1	potassium channel	Transport facilitation	Ion transporter	Czempinski, K. et al.	EMBO J. 16 (10), 2565-75 (1997)
AtKUP1	potassium transporter	Transport facilitation	Ion transporter	Fu, H.H. & Luan, S.	Plant Cell. 10 (1), 63-73 (1998)
AKT1	potassium transporter	Transport facilitation	Ion transporter	Sentenac, H. et al.	Science. 256 (5057), 663-5 (1992)
KUP3p	potassium transporter	Transport facilitation	Ion transporter	Kim, E.J. et al.	Plant Cell 10 (1), 51-62 (1998)
SOS1	putative Na <sup>+</sup> /H <sup>+</sup> antiporter	Transport facilitation	Ion transporter	Shi, H. et al.	Proc. Natl. Acad. Sci. U.S.A. 97 (12), 6896-6901 (2000)
AtKT1	putative potassium transporter	Transport facilitation	Ion transporter	Quintero, F.J. & Blatt, M.R.	FEBS Lett. 415 (2), 206-211 (1997)
AtKT2	putative potassium transporter	Transport facilitation	Ion transporter	Quintero, F.J. & Blatt, M.R.	FEBS Lett. 415 (2), 206-211 (1997)
AtKT5	putative potassium transporter	Transport facilitation	Ion transporter	Quintero, F.J. & Blatt, M.R.	FEBS Lett. 415 (2), 206-211 (1997)
AtKT4p	putative potassium transporter	Transport facilitation	Ion transporter	Quintero, F.J. & Blatt, M.R.	FEBS Lett. 415 (2), 206-211 (1997)
AtKT3p	putative potassium transporter	Transport facilitation	Ion transporter	Quintero, F.J. & Blatt, M.R.	FEBS Lett. 415 (2), 206-211 (1997)
AtPT4	putative proton/phosphate cotransporter	Transport facilitation	Ion transporter	Lu, Y.-P. et al.	Plant Physiol. 114, 747 (1997)
AtNHX1	sodium proton exchanger Nhx1	Transport facilitation	Ion transporter	Gaxiola, R.A. et al.	Proc Natl Acad Sci U S A. 96 (4), 1480-5 (1999)
HKT1	sodium transporter	Transport facilitation	Ion transporter	Uozumi, N. et al.	Plant Physiol. 122 (4), 1249-1260 (2000)
pGlcT	hexose transporter	Transport facilitation	Sugar and carbohydrate transporters	Weber, A. et al.	Plant Cell 12 (5), 787-802 (2000)
STP4	monosaccharid transporter	Transport facilitation	Sugar and carbohydrate transporters	Truernit, E. et al.	Plant Cell 8 (12), 2169-2182 (1996)
ERD6	putative sugar transporter	Transport facilitation	Sugar and carbohydrate transporters	Kiyosue, T. et al.	Biochim Biophys Acta. 1370 (2), 187-91 (1998)
ATPase	ATPase gene	Transport facilitation	Transport ATPases	Pardo, J.M. & Serrano, R.	J. Biol. Chem. 264, 8557-8562 (1989)
AtMRP1	glutathione S-conjugate transporting ATPase	Transport facilitation	Transport ATPases	Lu, Y.P. et al.	Proc. Natl. Acad. Sci. U.S.A. 94 (15), 8243-8248 (1997)
PMA	membrane proton ATPase	Transport facilitation	Transport ATPases	Harper, J.F. et al.	Proc. Natl. Acad. Sci. U.S.A. 86, 1234-1238 (1989)
H <sup>+</sup> -ATPase	plasma membrane H <sup>+</sup> -ATPase gene	Transport facilitation	Transport ATPases	Harper, J.F. et al.	J. Biol. Chem. 265, 13601-13608 (1990)
DET3	vacuolar ATP synthase subunit C	Transport facilitation	Transport ATPases	Schumacher, K. et al.	Gene Dev 13 (24), 3259-3270 (1999)
V-type proton-ATPase	vacuolar proton ATPase subunit E	Transport facilitation	Transport ATPases	Dietz, K.J. & Arbinger, B.	Biochim. Biophys. Acta 1281 (2), 134-138 (1996)
vATPA	vacuolar type ATPase subunit A	Transport facilitation	Transport ATPases	Magnotta, S. & Gogarten, J.P.	Plant Physiol. 115, 1730 (1997)

vATPD	v-ATPase subunit D	Transport facilitation	Transport ATPases	Kluge, C. et al.	Biochim Biophys Acta. 1419 (1), 105-10 (1999)
NLM1	aquaporin	Transport facilitation	Water channels	Weig, A. et al.	Plant Physiol. 114 (4), 1347-57 (1997)
TIP	delta tonoplast integral protein	Transport facilitation	Water channels	Daniels, M.J. et al.	Plant Cell. 8 (4), 587-99 (1996)
PIP1b	PIP1b protein	Transport facilitation	Water channels	Kaldenhoff, R. et al.	Plant Mol Biol 23 (6), 1187-98 (1993)
PIP3	plasma membrane intrinsic protein	Transport facilitation	Water channels	Weig, A. et al.	Plant Physiol. 114 (4), 1347-57 (1997)
SIMP	plasma membrane intrinsic protein	Transport facilitation	Water channels	Pih, K. T. et al.	Mol Cells. 9 (1), 84-90 (1999)
PIP1a	plasma membrane intrinsic protein 1a	Transport facilitation	Water channels	Kammerloher, W. et al.	Plant J 6 (2), 187-99 (1994)
PIP1c	plasma membrane intrinsic protein 1c	Transport facilitation	Water channels	Kammerloher, W. et al.	Plant J 6 (2), 187-99 (1994)
PIP2a	plasma membrane intrinsic protein 2a	Transport facilitation	Water channels	Kammerloher, W. et al.	Plant J 6 (2), 187-99 (1994)
PIP2b	plasma membrane intrinsic protein 2b	Transport facilitation	Water channels	Kammerloher, W. et al.	Plant J 6 (2), 187-99 (1994)
alpha-TIP	tonoplast intrinsic protein (alpha-TIP)	Transport facilitation	Water channels	Hofte, H.R. et al.	Plant Physiol. 99, 561-570 (1992)
gama-TIP	tonoplast intrinsic protein (gamma-TIP)	Transport facilitation	Water channels	Hofte, H.R. et al.	Plant Physiol. 99, 561-570 (1992)
rd28	transmembrane channel protein	Transport facilitation	Water channels	Yamaguchi-Shinozaki, K. et al.	Plant Cell Physiol. 33, 217-224 (1992)
TMP-C	transmembrane protein (TMP-C)	Transport facilitation	Water channels	Kinoshita, T. et al.	Plant Physiol. 105 (4), 1441-1442 (1994)
TMP-A	transmembrane protein A	Transport facilitation	Water channels	Shagan, T. & Bar-Zvi, D.	Plant Physiol. 101 (4), 1397-1398 (1993)
LEA AtM17	late-embryogenesis abundant	Unclassified proteins		Raynal, M. et al.	Plant Mol Biol. 40 (1), 153-65 (1999)
LEA AtM10	late-embryogenesis abundant	Unclassified proteins		Raynal, M. et al.	Plant Mol Biol. 40 (1), 153-65 (1999)
AD04H10	lethal leaf-spot 1 homolog Lls1: Contains Prokaryotic membrane lipoprotein lipid attachment site AA150-160	Cell rescue, defense, cell death & ageing	Cell death	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04B03	mandelonitrile lyase-like protein	Cell rescue, defense, cell death & ageing	Cyanogenesis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06G10	similar to glutathione S-transferase TSI-1 (qij2190992)	Cell rescue, defense, cell death & ageing	Detoxification	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05D03	not annotated, pir  A29368 prostaglandin omega-hydroxylase (EC 1.14.15.-) cytochrome P450 4A4- rabbit	Cell rescue, defense, cell death & ageing	Radical scavenging	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06E03	strong similarity to gb D14550 extracellular dermal glycoprotein (EDGP) precursor from Daucus carota	Cell rescue, defense, cell death & ageing	Stress response	Gong,Z.-Z. et al.	In press, Plant Physiology 2001

AD03C02	strong similarity to low temperature and salt responsive protein LTI6A - Arabidopsis thaliana	Cell rescue, defense, cell death & ageing	Stress response	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03D05	cold-regulated protein COR6.6 (KIN2)	Cell rescue, defense, cell death & ageing	Stress response	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03D11	cold-regulated protein cor15a precursor	Cell rescue, defense, cell death & ageing	Stress response	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03F02	desiccation-responsive rd29A	Cell rescue, defense, cell death & ageing	Stress response	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05G04	rd22 gene	Cell Rescue, defense, cell death & ageing	Stress response	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06A08	similar to cold-regulated protein cor47	Cell Rescue, defense, cell death & ageing	Stress response	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06C02	putative protein transport protein SEC61 alpha subunit	Cellular transport & transport mechanisms	Other intracellular-transport activities	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06D12	putative transport protein, ref[NP_062761.1 SEC23B (S. cerevisiae)	Cellular transport & transport mechanisms	Other intracellular-transport activities	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06A05	periaxin-like protein	Cellular transport & transport mechanisms	Vesicular transport	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06A07	similar to vacuolar processing enzyme	Cellular transport & transport mechanisms	Vesicular transport	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05D04	metallothionein	Ion homeostasis	Homeostasis of cations	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04A02	blue copper binding protein	Ion homeostasis	Homeostasis of cations	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03A02	tyrosine transaminase like protein	Metabolism	Amino acid metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05B09	strong similarity to gb S77096 aldehyde dehydrogenase homolog from Brassica napus and is a member of PF 00171 Aldehyde dehydrogenase family.	Metabolism	Amino acid metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06C01	glutamine-dependent asparagine synthetase	Metabolism	Amino acid metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06G04	arginine decarboxylase SPE2	Metabolism	Amino acid metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03B06	leucoanthocyanidin dioxygenase-like protein	Metabolism	Anthocyanin biosynthesis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04A11	putative anthocyanidin synthase	Metabolism	Anthocyanin biosynthesis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06F06	strong similarity to UDP rhamnose-anthocyanidin-3-glucoside rhamnosyltransferase, Petunia hybrida	Metabolism	Anthocyanin biosynthesis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001

AD03C01	putative beta-amylase	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05E02	2-oxoglutarate dehydrogenase, E1 subunit-like protein	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06F05	jasmonate inducible protein isolog, myrosinase binding protein-like	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05C05	beta-glucosidase homolog (BG1)	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03G09	Alcohol Dehydrogenase	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04E06	contains similarity to endo-1,3-1,4-beta-D-glucanase	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05B03	gene_id:MDB19.5 Similar to gb Y09437 myrosinase binding protein from Brassica napus	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD07F07	putative endochitinase	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD07F08	polygalacturonase inhibiting protein	Metabolism	C-compound and carbohydrate metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03B08	putative protein, sp P24484 LIP2_MORS P LIPASE 2 (TRIACYLGLYCEROL LIPASE)	Metabolism	Lipid, fatty acid and isoprenoid metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04D07	unknown, emb CAB95731.1  (AJ272026) allene oxide cyclase [Lycopersicon esculentum]	Metabolism	Lipid, fatty acid and isoprenoid metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04G12	lipoxygenase AtLOX2	Metabolism	Lipid, fatty acid and isoprenoid metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03C06	palmitoyl-protein thioesterase precursor-like	Metabolism	Lipid, fatty acid and isoprenoid metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06D10	nitrilase 2	Metabolism	Nitrogen and sulphur metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04H11	ATP sulfurylase	Metabolism	Photosynthesis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD08A06	putative chlorophyll a/b binding protein	Metabolism	Photosynthesis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD10C12	photosystem I subunit PSI-E-like protein	Metabolism	Photosynthesis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD10D06	putative PSBY emb CAA11248	Metabolism	Photosynthesis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04B12	ripening-related protein-like; contains similarity to pectinesterase	Metabolism	Secondary metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001

AD06E01	not annotated, pir T11610 probable cinnamyl-alcohol dehydrogenase (EC 1.1.1.195) CPRD14 [Vigna unguiculata]	Metabolism	Secondary metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06H02	strong similarity to similar to pectinesterase, contains Pectinesterase signatures AA407-414	Metabolism	Secondary metabolism	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06E12	chaperone protein (atj)	Protein destination	Protein folding and stabilization	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD07H10	mitochondrial chaperonin (HSP60)	Protein destination	Protein folding and stabilization	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD07C05	unknown protein, sp O59413 PFPL_PYRH O PROTEASE I [Pyrococcus horikoshii]	Protein destination	Proteolysis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD10H03	contains similarity to Pfam family PFO0240 - Ubiquitin family	Protein destination	Proteolysis	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06D03	putative protein: similarity to lin-10 protein - Rattus norvegicus, PIR:JE0239	Signal transduction	Intracellular communication	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06F11	Contains similarity to a protein kinase qb D88207	Signal transduction	Intracellular communication	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD10H07	translationally controlled tumor protein-like	Signal transduction	Intracellular communication	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05B05	contains similarity to unknown protein, (AF117897) rab11 binding protein [Bos taurus]	Signal transduction	Intracellular transport	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06A11	G protein-coupled receptor-like protein	Signal transduction	Intracellular transport	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05F04	casein kinase-like protein	Signal transduction	Key kinase	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD08H07	putative receptor-like protein kinase	Signal transduction	Receptor proteins	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04B07	hypothetical protein, dbj BAB11554.1  (AB011479) contains similarity to bHLH DNA-binding protein~gene_id:MNA5.5 [Arabidopsis thaliana]	Transcription	Transcriptional control	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05G10	putative protein: similarity to TATA-binding protein-binding protein, ABT1 - Mus musculus, EMBL:AB021860	Transcription	Transcriptional control	Gong,Z.-Z. et al.	In press, Plant Physiology 2001

AD06D08	transcription factor-like protein	Transcription	Transcriptional control	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD08G06	hypothetical protein, emb CAB92072.1  (AL121575) dJ914N13.2.1 (cofactor required for Sp1 transcriptional activation, subunit 3 (130kd) (CRSP130, DRIP130, SUR2, KIAA1216) (isoform 1)) [Homo sapiens]	Transcription	Transcriptional control	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06B06	putative protein: similarity to amino acid transport protein, Arabidopsis thaliana, EMBL:U39783	Transport facilitation	Amino-acid transporters	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04E04	ferredoxin--nitrite reductase	Transport facilitation	Ion transporter	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD10C07	nicotianamine synthase	Transport facilitation	Ion transporter	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD08A09	putative sulfate transporter	Transport facilitation	Ion transporter	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06E08	lipid transfer protein; glossy1 homolog	Transport facilitation	Lipid transporter	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05E11	putative peptide transporter	Transport facilitation	Peptide-transporters	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04B05	contains similarity to sugar transporters	Transport facilitation	Sugar and carbohydrate transporters	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04C05	putative protein, sp Q96250 ATP3_ARATH ATP SYNTHASE GAMMA CHAIN, MITOCHONDRIAL PRECURSOR	Transport facilitation	Transport ATPases	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD10C11	ABC transporter-like protein	Transport facilitation	Transport ATPases	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04B01	putative AAA-type ATPase	Transport facilitation	Transport ATPases	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06B07	fibrillar-like protein: strong similarity to probable fibrillar (Sb21) mRNA, Picea mariana, AF051216	Unclassified proteins		Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD04F04	putative protein: similarity to Arabidopsis thaliana nap gene, PID:e1234813	Unclassified proteins		Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05C10	glycine-rich protein (clone AtGRP8): Contains Eukaryotic putative RNA-binding region RNP-1 signature AA47-54	Unclassified proteins		Gong,Z.-Z. et al.	In press, Plant Physiology 2001

AD06A09	putative protein: similarity to PIT1 - Arabidopsis thaliana, GB: AF130849	Unclassified proteins	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD08B06	putative retroelement pol polyprotein	Unclassified proteins	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05E05	Vsp2 gene for vegetative storage protein	Unclassified proteins	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05B11	AtPP-like protein: Prokaryotic membrane lipoprotein lipid attachment site AA199-209 (AF133053) S-adenosyl-L-methionine:salicylic acid carboxyl methyltransferase [Clarkia breweri]	Unclassified proteins	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD03E08	not annotated, dbj BAB02819.1  (AB024036) dbj BAA87936.1~gene _id:MQC12.15, similar to unknown	Unknown	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05D06	hypothetical protein	Unknown	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD05F09	similar to unknown protein	Unknown	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06C07	unknown protein	Unknown	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06C08	not annotated, emb CAB86422.1  (AL138648) putative protein [Arabidopsis thaliana]	Unknown	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD06F02	not annotated	Unknown	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD10D05	not annotated, gb AAF28474.1 AF173553_1 (AF173553) V-ATPase 110 kDa integral membrane subunit [Manduca sexta]	Unknown	Gong,Z.-Z. et al.	In press, Plant Physiology 2001
AD10F07	not annotated, sp Q08180 ICCR_DROME IRREGULAR CHIASM C. ROUGHEST PROTEIN PRECURSOR (IRREC PROTEIN)	Unknown	Gong,Z.-Z. et al.	In press, Plant Physiology 2001