

ANHANG

Table Ia. Differentially regulated genes in the arr2 loss-of-function mutant compared to wildtype

AGI No.	Putative Function	Fold Change ^a
Abscisic acid-related		
AT4G24960	abscisic acid-induced - like protein	-2.1
AT4G01600	ABA-repsponsive protein	2.4
AT5G15960	cold and ABA inducible protein kin1	-2.2
Auxin-related		
AT1G51760	IAA-Ala hydrolase (IAR3)	-3.2
AT1G78370	2,4-D inducible glutathione S-transferase	-3.0
AT1G05670	indole-3-acetate beta-glucosyltransferase	-3.0
AT4G15490	indole-3-acetate beta-glucosyltransferase like protein	-2.1
AT5G13370	auxin reponsive - like protein	-3.9
Cytokinin-related		
AT4G29740	cytokinin oxidase - like protein	-2.9
Ethylene-related		
AT1G28370	ethylene-responsive element binding factor (EREBP)	-2.5
AT1G05010	ACC oxidase (ACO)	-2.8
AT2G44840	ethylene responsive element binding protein (EREBP)	-3.4
AT2G31230	ethylene responsive element binding protein (EREBP)	-2.7
AT3G24500	ethylene-responsive transcriptional coactivator	-2.2
AT3G23240	ethylene-responsive element binding factor 1 (ERF1)	-2.0
AT3G23150	ethylene receptor, (ETR2)	-2.2
AT4G11280	ACC synthase (AtACS-6)	-2.8
Jasmonate-related		
AT1G17420	lipoxygenase	-4.1
AT3G16470	lectin, similar to jasmonate inducible protein	-4.3
AT3G45140	lipoxygenase AtLOX2	-2.8
Defense-related		
AT1G33950	AIG1-like protein	2.5
AT1G33960	AIG1	5.1
AT1G72900	virus resistance protein	-5.8
AT1G72920	virus resistance protein	-4.7
AT1G33600	disease resistance protein	-3.3
AT1G57630	disease resistance protein RPP1-WsB	-3.1
AT1G67980	S-adenosyl-L-methionine:trans-caffeoyl-Coenzyme A 3-O-methyltransferase	5.1
AT1G72940	disease resistance protein	-3.5
AT1G80840	WRKY transcription factor	-5.1
AT1G61560	Mlo protein	-2.3
AT1G75380	wound-responsive protein	2.2
AT1G73260	trypsin inhibitor	6.8
AT1G77810	Avr9 elicitor response protein	-2.0
AT2G32140	disease resistance protein	-2.9
AT2G34930	disease resistance protein	-3.6
AT2G46400	WRKY transcription factor	-5.8
AT2G29470	glutathione S-transferase	3.0
AT2G14610	pathogenesis-related PR-1-like protein	19.8
AT2G26010	antifungal protein	2.8
AT2G43620	endochitinase	-3.3
AT2G38470	WRKY transcription factor	-3.6
AT2G26020	antifungal protein	2.3
AT2G28080	glucosyltransferase	-4.6
AT2G29450	glutathione S-transferase	-2.8
AT2G38870	protease inhibitor	-2.7
AT2G43550	trypsin inhibitor	-3.1
AT2G43570	endochitinase isolog	4.1
AT3G57240	beta-1,3-glucanase	3.4
AT3G57260	beta-1,3-glucanase 2 (PR-2)	4.7
AT3G04670	elicitor response element binding protein WRKY3 isolog	-2.5
AT3G04210	disease resistance protein	-2.6
AT3G16530	lectin	-4.7
AT3G28890	disease resistance protein	-3.9
AT3G44400	disease resistance - like protein	-2.2
AT3G54420	class IV chitinase (CHIV)	-2.2
AT3G04720	hevein-like protein precursor (PR-4)	2.8
AT3G09270	glutathione transferase	4.6
AT3G12220	serine carboxypeptidase	4.3
AT3G16400	lectin	-3.1
AT4G39410	WRKY transcription factor	-2.0
AT4G11320	cysteine proteinase	-2.7
AT4G12880	blue copper-binding protein	-2.7
AT5G41750	disease resistance protein-like	-2.4
AT5G44430	antifungal protein-like	4.4
AT5G13080	WRKY transcription factor	3.8
AT5G27380	glutathione synthetase gsh2	-2.8
AT5G64120	peroxidase	-2.9

AT1G52400	beta-glucosidase	-3
AT1G60270	beta-glucosidase	-3.5
AT5G44420	antifungal protein-like (PDF1.2)	3.5
AT1G10370	glutathione S-transferase	-3.8
AT5G26030	ferrochelatase-I	-3.5
AT5G39150	germin - like protein	2.6
AT1G75040	thaumatin-like protein	5.7
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Phenylpropane biosynthesis-related		
AT1G18590	flavonol 4 -sulfotransferase	-2.7
AT1G65860	flavin-containing monooxygenase FMO3	-3.4
AT1G74100	flavonol sulfotransferase	-3.7
AT1G74710	isochorismate synthase (icsl)	-2.7
AT1G80820	cinnamoyl CoA reductase	-3.5
AT2G37040	phenylalanine ammonia lyase (PAL1)	-3.6
AT2G38240	anthocyanidin synthase	-6.5
AT3G21230	4-coumarate:CoA ligase 2	-2.8
AT3G53260	phenylalanine ammonia-lyase	-5.5
AT4G20860	berberine bridge enzyme - like protein	-2.1
AT5G05600	leucoanthocyanidin dioxygenase-like protein	-2.6
AT5G24530	flavanone 3-hydroxylase protein	4.2
AT4G31970	flavonoid 3,5 -hydroxylase	2.5
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Abiotic stress-related		
AT1G36390	heat shock protein	-2.4
AT1G27730	salt-tolerance zinc finger protein	-3.3
AT2G42540	cold-regulated protein cor15a precursor	-3
AT3G12580	heat shock protein 70	-5.8
AT3G47440	aquaporin-like protein	-2.5
AT3G25760	ERD12 protein (ERD12)	-8.5
AT3G46230	heat shock protein 17	-2.3
AT3G14200	heat shock protein EMB1-like protein	-3.1
AT4G30650	low temperature and salt responsive protein homolog	-3.3
AT4G11650	osmotin precursor	7.4
AT4G37220	cold acclimation protein homolog	2.7
AT4G21100	UV-damaged DNA-binding protein- like	-2.1
AT4G39030	DNA damage-inducible protein - Synechocystis sp.,PIR2:S77364	-6.6
AT4G26010	peroxidase	2.2
AT5G52640	heat-shock protein	-2.3
AT5G56000	heat shock protein	-2.5
AT5G56010	heat shock protein 90	-2.8
AT5G52310	low-temperature-induced protein 78	-2.6
AT5G56030	heat shock protein 81-2	-2.6
AT5G18780	heat shock transcription factor-like protein	3.1
AT1G30700	reticuline oxidase-like protein	6.2
AT1G31710	copper amine oxidase	-2.7
AT1G26390	reticuline oxidase-like protein	3.2
AT1G06640	oxidoreductase	-2.5
AT1G76680	12-oxophytodienoate reductase (OPR1)	-5.4
AT2G43350	glutathione peroxidase	2.5
AT4G10500	Fe(II) ascorbate oxidase	2.8
AT4G14630	germin precursor oxalate oxidase	4.9
AT4G15920	cytochrome c oxidoreductase like protein	-2.5
AT4G20830	reticuline oxidase -like protein	-4.9
AT4G03050	oxidoreductase	-2.9
AT5G64120	peroxidase	-2.9
AT1G16400	cytochrome P450	-2.8
AT1G16410	cytochrome P450	-3.2
AT2G22330	cytochrome P450	-4.7
AT2G25160	cytochrome P450	-2.6
AT3G26180	cytochrome P450	2.6
AT3G48520	cytochrome P450-like protein	-2.9
AT3G50930	BCS1 protein-like protein cytochrome c	-4.3
AT4G10040	cytochrome c	-2.8
AT4G37410	cytochrome P450 monooxygenase-like protein	-2.9
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Transcriptional regulators		
AT1G74430	MYB family transcription factor	-2.5
AT1G01260	transcription factor MYC7E	-2.3
AT1G08930	zinc finger protein ATZF1	-2.3
AT1G53010	zinc finger protein	-2.8
AT1G68130	C2H2-type zinc finger protein	-2.6
AT1G43160	AH2 domain containing protein	-9.4
AT1G01060	DNA-binding protein	-2.6
AT2G45660	MADS-box protein (AGL20)	2.4
AT2G28710	C2H2-type zinc finger protein	3.4
AT2G28200	zinc-finger protein	2.6
AT2G28530	RING zinc finger transcription negative regulator protein	-2.5
AT2G18050	histone H1	3.3
AT2G44740	PREG1-like negative regulator	2.5
AT3G19130	nuclear acid binding protein	-2.2
AT3G23250	myb-related transcription factor	-4.2
AT3G21870	PREG-like protein	2.6

AT3G55980	protein; zinc finger transcription factor (PE1)	-3
AT3G46080	zinc finger -like protein; zinc finger protein Zat7	2.0
AT3G58070	zinc finger-like protein	2.0
AT3G13610	DNA-binding protein	2.8
AT4G04840	transcriptional regulator	-3.6
AT4G34590	bZIP transcription factor ATB2	-2.8
AT4G18170	DNA binding-like WRKY protein	-2.9
AT5G10760	nucleoid DNA-binding protein cnd41-like protein	6.2
AT5G46760	bHLH protein-like	-2.5
AT5G46750	zinc finger protein Glo3-like	-2
AT5G59730	leucine zipper-containing protein	-2.5
AT5G47640	CCAAT-box-binding transcription factor	2.1
Kinases / phosphatases		
AT1G56120	wall-associated kinase 2	2.7
AT1G65790	receptor kinase	2.8
AT1G73080	receptor protein kinase,	-2.6
AT1G74360	receptor protein kinase	-2.3
AT1G09970	receptor-like protein kinase	-3.8
AT1G51800	receptor protein kinase	-2.3
AT1G11050	Ser Thr protein kinase isolog	-2.4
AT1G48260	CIPK17	2.0
AT1G03740	cdc2-like protein kinase	-2.4
AT1G53430	receptor-like serine threonine kinase	-2.2
AT1G16120	wall-associated kinase	2.2
AT2G30360	protein kinase	-3.8
AT2G39660	protein kinase	-2.5
AT2G14750	adenosine phosphosulfate kinase	-2.2
AT3G08870	serine threonine protein kinase	2.0
AT3G17790	acid phosphatase type 5	2.5
AT3G28450	receptor kinase	-2.8
AT3G02020	aspartate kinase	-3.2
AT3G11410	protein phosphatase 2C (PP2C)	2.1
AT4G23570	phosphatase like protein	-2.1
AT4G21390	serine threonine kinase - like protein	-2.6
AT4G23210	serine threonine kinase - like protein	-4.0
AT4G28560	protein kinase Xa21	3.0
AT4G13000	protein kinase homolog	2.3
AT4G27800	protein phosphatase homolog (PPH1)	2.0
AT4G18250	receptor serine threonine kinase-like protein	-2.1
AT4G33430	somatic embryogenesis receptor-like kinase -like protein	-2.0
AT4G04570	receptor-like protein kinase	-2.4
AT4G23190	serine threonine kinase - like protein	-2.2
AT4G23140	serine threonine kinase - like protein	2.2
AT5G41180	receptor kinase-like protein	-2.5
AT5G51830	fructokinase 1	-2.6
AT5G20050	receptor-like protein kinase - like protein	-2.4
AT5G25930	receptor-like protein kinase - like	-2.1
AT5G02800	protein kinase - like	-2.3
AT5G01540	receptor like protein kinase	-2.9
AT5G43380	serine threonine protein phosphatase type 1-like protein	-2.7
AT5G03350	Protein kinase-like protein	6.6
AT1G01560	MAP kinase	-2.5
AT2G01450	MAP kinase	-2.7
Signalling- related		
AT1G21920	phosphatidylinositol-4-phosphate 5-kinase	2.0
AT1G20090	RAC-like GTP-binding protein ARAC4	2.7
AT1G76650	calmodulin	-2.6
AT1G27770	envelope Ca ²⁺ -ATPase-like protein	-2.8
AT1G18210	calcium-binding protein	-2.3
AT2G41110	calmodulin (cam2)	-2.1
AT2G43290	calcium binding protein	-2.0
AT2G26530	AR781, similar to yeast pheromone receptor	-7.2
AT3G21700	SGP1 monomeric G-protein	-2.6
AT3G57330	Ca ²⁺ -transporting ATPase-like protein	-2.4
AT4G20780	calcium-binding protein - like	-2.3
AT4G37640	plasma membrane-type calcium ATPase (ACA2)	-3.0
AT4G39990	GTP-binding protein GB3	-2.3
AT5G49480	NaCl-inducible Ca ²⁺ -binding protein-like; calmodulin-like	-2.4
AT5G42380	calmodulin-like protein	-3.6
AT5G54490	EF-hand Ca ²⁺ -binding CCD1-like protein	-3.8
AT5G64300	GTP cyclohydrolase II envelope Ca ²⁺ -ATPase	-2.0
AT1G27770	envelope Ca ²⁺ -ATPase	-2.8
AT4G37640	plasma membrane-type calcium ATPase	-3.0
Various		
AT1G07240	UDP-glucose glucosyltransferase	-3.1
AT1G14790	RNA-directed RNA polymerase	2.5
AT1G16370	transport protein	-4.1
AT1G19550	GSH-dependent dehydroascorbate reductase 1	-2.7
AT1G19570	GSH- dependent dehydroascorbate reductase 1	-2.8
AT1G21110	O-methyltransferase	-3.7

AT1G22400	UDP-glucose glucosyltransferase	-3.6
AT1G30620	UDP-galactose 4-epimerase-like protein	-3.1
AT1G54030	myrosinase-associated protein	-3.2
AT1G61120	S-linalool synthase	-2.5
AT1G66760	MATE efflux family protein	-3.6
AT1G76790	catechol O-methyltransferase	-3.9
AT1G78850	glycoprotein(EP1)	-2.7
AT1G20510	hypothetical protein	-3.4
AT1G08630	L-allo-threonine aldolase-like protein	3.4
AT1G19670	coronatine-induced protein 1-like protein	-5.8
AT1G31550	lipase-like protein	-3.3
AT1G76260	WD-repeat containing protein	-2.7
AT1G29980	GPI-anchored protein	-2.6
AT2G02000	glutamate decarboxylase	-5.2
AT2G02010	glutamate decarboxylase	-3.4
AT2G06050	12-oxophytodienoate-10,11-reductase	-6.9
AT2G15480	glucosyltransferase;	-2.7
AT2G20340	tyrosine decarboxylase;	-2.7
AT2G24850	tyrosine aminotransferase	-3.3
AT2G29350	tropinone reductase	3.4
AT2G36880	s-adenosylmethionine synthetase	-4.1
AT2G37450	nodulin-like protein	2.3
AT2G39330	myrosinase-binding protein	-4.2
AT2G43100	3-isopropylmalate dehydratase, small subunit	-3.1
AT2G15220	WAS-2; secretory protein-like protein	3.0
AT3G01420	feebly-like protein	2.7
AT3G03780	methionine synthase	-3.8
AT3G12145	leucine-rich repeat protein FLR1	-3.3
AT3G17390	s-adenosylmethionine synthetase	-5.1
AT3G19710	branched-chain amino acid aminotransferase	-4.1
AT3G22890	ATP sulfurylase,	-3.1
AT3G29360	UDP-glucose dehydrogenase	-2.7
AT3G44860	AtPP -like protein	-4.9
AT3G49620	SRG1 protein	-4.7
AT3G50970	dehydrin Xero2	-5.8
AT3G51160	GDP-D-mannose-4,6-dehydratase (MUR1)	-2.6
AT3G51450	mucin -like protein	-3.2
AT3G58990	3-isopropylmalate dehydratase-like protein (small subunit)	-3.0
AT3G60140	beta-glucosidase-like protein	7.5
AT3G58840	P115 homolog-like protein	2.6
AT3G59660	phospholipid-binding domain C2-containing protein	-2.5
AT3G01830	calmodulin-like protein	-2.8
AT4G00700	phosphoribosylanthranilate transferase	2.9
AT4G02050	hexose transporter	2.7
AT4G08690	phosphoglyceride transfer protein	-2.5
AT4G08870	arginase	-2.8
AT4G12720	growth factor like protein	-4.5
AT4G13930	hydroxymethyltransferase	-2.6
AT4G18440	adenylosuccinate lyase - like protein	-3.5
AT4G23600	tyrosine transaminase like protein	-6.6
AT4G24380	dihydrofolate reductase - Schizosaccharomyces pombe	-4.3
AT4G27280	centrin	-3.6
AT4G27560	UDP rhamnose-anthocyanidin-3-glucoside rhamnosyltransferase - like protein	-6.8
AT4G32940	gamma-VPE (vacuolar processing enzyme)	2.6
AT4G34710	arginine decarboxylase SPE2	-3.2
AT4G39980	2-dehydro-3-deoxyphosphoheptonate aldolase	-2.6
AT5G03630	monodehydroascorbate reductase (NADH) - like protein	-4.4
AT5G06860	polygalacturonase inhibiting protein 1	-3.5
AT5G06870	polygalacturonase inhibiting protein	-4.5
AT5G07010	steroid sulfotransferase-like protein	-4.9
AT5G07460	peptide methionine sulfoxide reductase-like protein	-9.5
AT5G11670	NADP dependent malic enzyme - like protein	-2.6
AT5G12940	DRT100 protein precursor	-3.4
AT5G13490	adenosine nucleotide translocator	-3.3
AT5G14200	3-isopropylmalate dehydrogenase	-5.6
AT5G19100	dermal glycoprotein precursor -like protein	-3.6
AT5G19110	dermal glycoprotein-like protein	-3.1
AT5G24420	6-phosphogluconolactonase-like protein	-4.6
AT5G24770	vegetative storage protein Vsp2	-4.5
AT5G40010	protein	5.7
AT5G40760	glucose-6-phosphate dehydrogenase	-3.6
AT5G42650	allene oxide synthase	-7.1
AT5G54610	ankyrin-repeat-containing protein-like	2.7
AT5G54710	ankyrin-like protein	-3.9
AT5G55170	ubiquitin-like protein	3.4
AT5G59450	scarecrow-like 11 - like protein	-3.4
AT5G62360	DC1.2 homologue - like protein	-3.9
AT5G63230	beta-1,3-glucanase-like protein	7.7
AT5G03490	UDPG glucosyltransferase-like protein	-2.7
AT5G64590	Mub3-like protein	2.5
AT2G37620	actin 3	-2.9
AT2G38750	annexin	-2.9

AT3G04070	NAM-like protein (no apical meristem)	3.4
AT5G52050	integral membrane protein-like	-2.6
AT4G30430	senescence-associated protein homolog	-2.0
AT1G21120	ATPase	-2.7
AT1G64200	H ⁺ -transporting ATPase protein	-3.7
AT1G74670	GAST1-like protein	2.9
AT5G22300	nitrilase 4 (sp P46011)	2.6
Unknown / hypothetical proteins		
AT1G03220	unknown protein	-3.1
AT1G14880	unknown protein	2.5
AT1G17380	unknown protein	-8.9
AT1G19180	unknown protein	-3.8
AT1G53480	unknown protein	4.4
AT1G57990	unknown protein	-2.5
AT1G74950	unknown protein	-2.7
AT1G76480	unknown protein	-2.1
AT1G76590	unknown protein	3.0
AT1G03850	hypothetical protein	3.6
AT1G05370	hypothetical protein	3.2
AT1G15160	hypothetical protein	-2.5
AT1G19960	hypothetical protein	3.6
AT1G21520	hypothetical protein	2.5
AT1G44760	hypothetical protein	2.5
AT1G55450	hypothetical protein	-3.6
AT1G60570	hypothetical protein	2.9
AT1G65690	hypothetical protein	2.9
AT1G70700	hypothetical protein	-2.9
AT1G80650	hypothetical protein	2.8
AT1G13520	hypothetical protein	3.2
AT1G27030	unknown protein	-3.3
AT1G07130	expressed protein	-3.7
AT2G14560	unknown protein	3.4
AT2G27080	unknown protein	-2.9
AT2G29670	unknown protein	2.7
AT2G32690	unknown protein	-2.6
AT2G36410	unknown protein	2.9
AT2G16840	hypothetical protein	2.9
AT2G22880	hypothetical protein	-4.9
AT2G30990	hypothetical protein	-2.6
AT2G34070	hypothetical protein	-2.5
AT2G41250	hypothetical protein	2.7
AT3G09350	hypothetical protein	-3.8
AT3G18250	hypothetical protein	4.3
AT3G28510	hypothetical protein	5.2
AT3G48650	hypothetical protein	-3.2
AT3G01290	unknown protein	-2.8
AT3G56470	unknown protein	2.8
AT3G02800	unknown protein	-3.6
AT3G02840	unknown protein	-3.0
AT3G09960	unknown protein	2.9
AT3G12970	unknown protein	4.1
AT3G18530	unknown protein	-4.8
AT3G23550	unknown protein	-3.2
AT3G25780	unknown protein	-10.7
AT3G43480	unknown protein	3.4
AT4G04330	hypothetical protein	3.6
AT4G10290	hypothetical protein	3.3
AT4G15610	hypothetical protein	4.9
AT4G17720	hypothetical protein	-2.8
AT4G10860	unknown protein	7.3
AT4G25030	unknown protein	-2.5
AT4G33050	unknown protein	-2.8
AT4G36500	unknown protein	-2.6
AT4G39670	unknown protein	-5.2
AT5G46720	unknown protein	2.6
AT5G46960	unknown protein	2.6
AT5G09830	unknown protein	-2.5
AT5G42570	unknown protein	-3.1
AT5G55120	unknown protein	-3.6
AT5G03210	unknown protein	-4.2
AT5G13220	unknown protein	-4.5
AT5G20700	unknown protein	-3.5
AT5G23820	unknown protein	-3.2
AT5G26690	unknown protein	4.9
AT5G27020	unknown protein	3.1
AT5G27760	unknown protei	-3.0
AT5G35080	unknown protein	2.6
AT5G39520	expressed protein	6.6
AT5G42030	unknown protein	2.6
AT5G50780	unknown protein	-2.5
AT1G57610	hypothetical protein	-3.6

AT3G60420	unknown protein	-2.6
AT4G22530	unknown protein	-3.1
AT4G24160	unknown protein	-2.8
AT4G24340	unknown protein	-4.4
AT4G24350	unknown protein	-6.3
AT4G24360	unknown protein	-5.0

^aAverage channel intensity ratio of *arr2* null mutant sample over wild-type sample.

Table IIa. Differentially regulated genes in ARR2^{D80E} compared to ARR2 overexpressors

AGI No.	Putative Function	Fold Change ^a
Abiscisic-acid-related		
AT4G26080	protein phosphatase ABI1	2.2
AT5G13200	ABA-responsive protein	2.2
AT5G57050	protein phosphatase ABI2	2.3
AT5G59220	ABA induced protein phosphatase (PP2C)	6.4
Abiotic stress-related		
AT1G08830	superoxidase dismutase	2.4
AT1G10910	membrane-associated salt-inducible protein	-2.2
AT1G11610	cytochrome P450	2.2
AT1G12090	pEARLI 1-like protein	-2.3
AT1G17020	SRG1-like protein	2.9
AT1G18650	beta-1,3-glucanase	-2.2
AT1G33720	cytochrome P450	4.4
AT1G33730	cytochrome P450	2.2
AT1G64900	cytochrome p450	-2.4
AT1G67360	stress related protein	3.3
AT1G67970	heat shock transcription factor (HSF)	2.7
AT2G17820	histidine kinase (AtHK1)	2.2
AT2G23680	cold acclimation protein	2.1
AT2G24180	cytochrome P450	2.2
AT2G30750	cytochrome P450	2.8
AT2G38380	peroxidase	5.4
AT2G42530	cold-regulated protein cor15b	-3.1
AT2G42540	cold-regulated protein cor15a	-2.8
AT2G43350	glutathione peroxidase	2.3
AT2G45570	cytochrome P450	5.7
AT2G46140	desiccation related protein	3.1
AT3G04720	hevein protein (PR-4)	2.4
AT3G11630	2-cys peroxiredoxin BAS1	-2.1
AT3G12580	heat shock protein 70 (HSP70)	3.7
AT3G20820	NA-damage-repair toleration protein DRT100	-2.1
AT3G20940	cytochrome P450	-2.5
AT2G34500	cytochrome P450	2.8
AT3G53800	Hsp70 binding protein HspBP1	-2.7
AT3G26210	cytochrome P450	2.1
AT3G26220	cytochrome P450	2.5
AT3G26320	cytochrome P450	4.2
AT3G26830	cytochrome P450	2.5
AT3G19270	cytochrome P450	5.1
AT3G49110	peroxidase	2.9
AT3G49120	peroxidase	3.1
AT3G54820	aquaporin 2	2.6
AT4G08770	peroxidase	3.3
AT4G09010	ascorbate peroxidase	-2.4
AT4G09350	heat shock protein (HSP)	-3.0
AT4G15910	drought-induced protein	2.1
AT4G16660	heat shock protein (HSP)	2.9
AT4G18880	heat shock transcription factor (HSF)	3.2
AT4G19230	cytochrome P450	2.7
AT4G24190	heat shock protein 90 (HSP90)	2.8
AT4G25100	superoxide dismutase	-2.7
AT4G15360	cytochrome P450	-2.0
AT4G30650	low temperature and salt responsive protein	-2.0
AT4G35970	ascorbate peroxidase	-2.0
AT4G36680	salt-inducible protein	2.3
AT4G36990	heat shock transcription factor 4 (HSF4)	6.2
AT4G37370	cytochrome P450	3.1
AT4G37430	cytochrome P450	4.1
AT4G39950	cytochrome P450	4.1
AT5G59610	heat shock protein 40 (HSP40. DnaJ-like)	-3.1
AT5G05410	DREB2A	3.8
AT5G09590	heat shock protein 70 (Hsc70-5)	2.4
AT5G48000	cytochrome P450	2.1
AT5G49480	NaCl-inducible Ca ²⁺ -binding protein	2.4
AT5G51890	peroxidase	-2.8

AT5G52300	low-temperature-induced 65 kD protein	2.3
AT5G56010	heat shock protein 90 (HSP90)	2.1
AT5G60950	phytochelatin synthetase	3.5
Auxin-related		
AT1G04250	auxin-induced protein	2.7
AT1G19840	auxin-induced protein	3.6
AT1G23080	auxin transport protein	-2.6
AT1G29440	auxin-induced protein	-3.0
AT1G75580	auxin induced protein	3.9
AT1G77850	auxin response factor	2.3
AT1G80390	auxin-responsive protein IAA2	-3.6
AT2G21210	auxin-regulated protein	-2.6
AT4G27260	GH3 - like protein	2.8
AT4G34750	auxin-regulated gene	3.3
AT4G34810	Small auxin up RNA (SAUR-AC1)	5.7
AT4G37390	auxin-responsive GH3 - like protein	5.0
AT4G38840	auxin-induced protein	-2.9
AT4G38860	auxin-induced protein	-2.4
AT5G13320	auxin-responsive protein	6.2
AT5G18010	auxin-induced protein	-3.2
AT5G18030	auxin-induced protein	-2.2
AT5G18050	auxin-induced protein	-4.5
AT5G18060	auxin-induced protein	-2.7
AT5G18080	auxin-induced protein	-3.2
Cell Wall-related		
AT1G02640	beta-xylosidase	-3.0
AT1G20190	expansin	-2.7
AT1G62500	proline-rich cell wall protein	2.7
AT2G06850	endoxylglucan glycosyltransferase	-2.1
AT2G26440	pectinesterase-	3.5
AT2G39700	expansin	3.4
AT2G45220	pectinesterase	4.9
AT2G46630	extensin	-2.0
AT3G14310	pectin methylesterase	-2.0
AT3G43270	pectinesterase	2.6
AT3G53190	pectate lyase	-2.0
AT3G62820	pectinesterase	-6.6
AT4G22500	glycine-rich cell wall protein	-9.6
AT4G24000	cellulose synthase catalytic subunit	3.5
AT4G37800	endo-xyloglucan transferase	-2.1
AT5G09760	pectin methylesterase	-2.0
AT5G16910	cellulose synthase catalytic subunit	2.2
AT5G55370	wax synthase	2.1
AT5G61660	glycine-rich cell wall structural protein 1-like	-2.9
Cytokinin-related		
AT1G19050	two-component response regulator (ARR7)	2.0
AT1G74890	two-component response regulator (ARR15)	3.8
AT2G07440	two-component response regulator (ARR24)	2.6
AT2G40670	two-component response regulator (ARR16)	10.7
AT2G41310	two-component response regulator (ARR8)	2.4
AT3G48100	two-component response regulator (ARR5)	9.2
AT3G56380	two-component response regulator (ARR4)	6.0
AT5G56970	cytokinin oxidase	14.1
Cytoskeleton-related		
AT1G20010	beta tubulin 1	-3.1
AT1G52410	myosin	2.7
AT2G16700	actin depolymerizing factor 5	3.0
AT5G12250	beta tubulin 6	-2.0
AT5G40450	microtubule-associated protein	-2.0
Defence-related		
AT1G02850	beta-glucosidase	2.3
AT1G05760	disease resistance protein RTM1	-2.2
AT1G05850	class I chitinase	-3.3
AT1G10360	glutathione S-transferase	-2.0
AT1G10370	glutathione S-transferase	-2.1
AT1G17190	glutathione S-transferase	5.4
AT1G27130	glutathione S-transferase	-2.2
AT1G33560	disease resistance protein	3.5
AT1G33950	AIG1-like protein	4.2
AT1G33960	AIG1	23.9
AT1G34760	disease resistance protein 14-3-3	-2.1
AT1G53290	Avr9 elicitor response protein-like	-2.2
AT1G57630	disease resistance protein	6.3
AT1G58190	disease resistance protein	2.2
AT1G61820	beta-glucosidase	2.9
AT1G65390	disease resistance protein RPS4	-4.5
AT1G69930	glutathione S-transferase	3.2
AT1G72230	blue copper protein	-2.2
AT1G72890	disease resistance protein	2.6
AT1G72920	virus resistance protein	2.0

AT1G72930	flax rust resistance protein	3.3
AT1G73260	trypsin inhibitor	13.2
AT1G74590	glutathione S-transferase	4.5
AT1G75280	NADPH oxidoreductase	-2.3
AT2G02930	glutathione S-transferase	2.1
AT2G02990	ribonuclease RNS1	4.8
AT2G14610	pathogenesis-related PR-1-like protein	6.9
AT2G24160	disease resistance protein	2.1
AT2G26010	antifungal protein	-2.6
AT2G26600	beta-1.3-glucanase	2.6
AT2G27870)	reverse transcriptase	-2.3
AT2G29460	glutathione S-transferase	4.1
AT2G29470	glutathione S-transferase	3.0
AT2G32140	disease resistance protein	2.1
AT2G32680	disease resistance protein	4.1
AT2G32860	beta-glucosidase	-3.9
AT2G33050	leucine-rich repeat disease resistance protein	-2.2
AT2G40000	nematode-resistance protein	2.0
AT2G43510	trypsin inhibitor	5.4
AT2G43570	endochitinase	13.4
AT3G07010	pectate lyase 2	-2.8
AT3G09270	glutathione transferase	3.4
AT3G11010	disease resistance protein	2.9
AT3G17070	peroxidase	-4.5
AT3G23120	disease resistance protein	5.4
AT3G25020	disease resistance protein	2.6
AT3G48720	hypersensitivity-related hsr201 protein	-2.9
AT3G55470	elicitor responsive protein (FIERG2)	2.6
AT3G55840	nematode resistance protein	2.6
AT3G57240	beta-1.3-glucanase	3.5
AT3G57260	beta-1.3-glucanase 2	6.8
AT3G60140	beta-glucosidase	36.8
AT4G01700	chitinase	2.9
AT4G13920	disease resistance Cf-2 like protein	2.2
AT4G19530	TMV resistance protein N - like	-2.4
AT4G38700	disease resistance response protein	3.1
AT5G14930	disease resistance protein EDS1	3.0
AT5G20230	blue copper binding protein	2.4
AT5G27060	resistance protein - like;Hcr2-0B	3.6
AT5G44420	antifungal protein (PDF1.2)	-2.6
AT5G44430	antifungal protein	-3.1
AT5G45110	regulatory protein NPR1-like	2.1
AT5G62740	hypersensitive-induced response protein HIR3	3.2
AT5G64110	peroxidase ATP3a-like	2.7
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Degradation-related		
AT1G04110	subtilisin-like serine protease	-2.3
AT1G10750	carboxyl-terminal peptidase	-2.4
AT1G20140	SKP1 ASK1 (At4)	3.1
AT1G20850	papain-type cysteine endopeptidase (XCP2-like)	-3.1
AT1G23410	ubiquitin extension protein	2.9
AT1G52600	signal peptidase subunit	2.2
AT1G53930	polyubiquitin	-2.5
AT1G68050	F-box protein FKF1	2.3
AT1G75460	protease	-2.2
AT1G77000	F-box protein AtFBL5	3.3
AT1G79720	aspartyl protease	-2.1
AT2G04160	subtilisin-like serine protease (AIR3-like)	3.4
AT2G20160	SKP1 ASK1 (At17)	6.7
AT2G22980	serine carboxypeptidase I-like	-2.0
AT2G39850	subtilisin-like serine protease	-3.1
AT2G44180	methionine aminopeptidase	2.3
AT2G47470	disulfide-isomerase	2.2
AT2G47940	DegP2 protease	-2.3
AT3G12220	serine carboxypeptidase	6.0
AT3G12490	cysteine proteinase inhibitor	2.0
AT3G15710	signal peptidase (21kDa subunit)	2.4
AT3G17000	E2 ubiquitin-conjugating enzyme	2.1
AT3G19390	cysteine proteinase RD21A-like	2.6
AT3G53270	endopeptidase Clp ATP-binding chain C	3.8
AT3G54650	F-box protein AtFBL17	-2.3
AT3G62250	ubiquitin extension protein (UBQ5)	2.1
AT4G01610	cathepsin B-like cysteine protease	2.9
AT4G01620	cathepsin B-like cysteine protease	3.5
AT4G11320	cysteine proteinase RD21A-like	2.2
AT4G21650	subtilisin proteinase	-2.0
AT4G35350	cysteine protease (XCP1-like)	-2.0
AT4G38930	ubiquitin fusion-degradation protein	2.5
AT5G24810	ubiquitin biosynthesis EIN AARF	2.7
AT5G27920	F-box protein	2.3
AT5G42300	ubiquitin	2.0
AT5G43060	cysteine proteinase	5.3

AT5G55170	ubiquitin	2.7
AT5G57480	AAA-type ATPase	4.7
AT5G57900	SKP1 interacting partner 1 (SKIP1)	2.0
Development-related		
AT1G01010	NAC domain protein	17.1
AT1G02220	NAM (no apical meristem) protein	9.7
AT1G02250	NAM protein	11.4
AT1G34180	NAM protein	3.9
AT1G34180	NAM protein	3.9
AT1G52690	late embryogenesis-abundant protein	8.9
AT1G52890	NAM protein	7.2
AT1G61340	late embryogenesis abundant protein	3.1
AT1G77450	GRAB1-like protein	2.1
AT2G22850	embryo-abundant protein	-2.6
AT2G41260	late embryogenesis abundant protein	4.8
AT2G44060	late embryogenesis abundant protein	2.0
AT3G04070	NAM protein	4.8
AT3G29035	NAM protein	2.5
AT3G61210	embryonic abundant protein (EMB34-like)	-2.0
AT4G00180	YABBY3 axial regulator	-2.1
AT5G06760	late embryogenesis abundant protein	4.7
AT5G07190	embryo-specific protein 3 (ATS3)	-2.1
AT5G18270	NAM (no apical meristem) protein	2.7
AT5G20240	PISTILLATA-like	3.9
AT5G22290	NAM protein	2.1
AT5G39610	NAM protein	2.6
Ethylene-related		
AT3G12500	basic chitinase	2.7
AT3G16050	ethylene-inducible protein	2.5
AT3G23150	ethylene receptor (ETR2)	2.4
AT3G23240	ethylene response factor 1 (ERF1)	3.9
AT3G50260	EREBP-3-like	2.9
AT4G23340	ACC oxidase	-2.6
AT4G26200	ACC synthase	2.4
AT5G20400	ethylene-forming-enzyme-like dioxygenase	2.9
AT5G43410	EREBP-3 like	-3.1
Folding-related		
AT1G04980	disulfide isomerase	2.6
AT1G06330	copper chaperone	-13.9
AT1G14980	chaperonin (CPN10)	2.2
AT1G21750	protein disulfide isomerase	3.8
AT1G23100	chaperonin	2.8
AT1G24510	chaperonin	2.2
AT2G47470	disulfide-isomerase	2.2
AT3G18190	chaperonin	2.0
AT3G23990	mitochondrial chaperonin (hsp60)	3.0
AT3G56070	peptidylprolyl isomerase	3.0
AT3G62030	peptidylprolyl isomerase	-2.1
AT3G62600	HIRA interacting protein 4 (dnaJ)-like	2.9
AT4G37910	dnaK-type molecular chaperone PHSP1	2.5
AT5G13410	peptidyl-prolyl cis-trans isomerase	-2.6
AT5G45680	FKBP-type peptidyl-prolyl cis-trans isomerase	-2.7
AT5G55220	trigger factor	-2.4
Gibberellin-related		
AT1G22690	GAST1-like protein	-4.5
AT1G74670	GAST1-like protein	-2.4
Jasmonate-related		
AT1G55020	lipoxygenase	8.8
AT3G16400	jasmonate inducible protein	6.0
AT3G16420	jasmonate inducible protein (lectin)	5.5
AT3G16430	jasmonate inducible protein	5.1
AT3G16450	jasmonate inducible protein (lectin)	31.0
AT3G16460	jasmonate inducible protein (lectin)	11.4
AT3G16470	jasmonate inducible protein (lectin)	2.2
AT5G48180	jasmonate inducible protein	3.0
Light-related		
AT1G02090	FUS5 protein-like	2.4
AT1G03130	photosystem I reaction center subunit II	-2.0
AT1G06680	OEC protein (23 kDa)	-2.1
AT1G14280	phytochrome kinase substrate 1	-3.4
AT1G19150	chlorophyll a b-binding protein (LHCP)	-4.0
AT1G51890	light repressible receptor protein kinase	2.6
AT2G40100	chlorophyll a b-binding protein (LHCP)	-3.0
AT3G15570	non-phototropic hypocotyl protein	-2.1
AT3G27690	chlorophyll a b-binding protein (LHCP)	-2.6
AT3G55330	OEC2	-2.1
AT3G61140	FUS6	2.3
AT4G14110	COP9	3.0
AT4G21280	OEC3-like	-2.3

AT5G57910	putative protein	3.8
AT5G59050	putative protein;	-2.5
AT5G60340	putative protein	2.0
AT5G60600	putative protein	-2.0
AT5G60800	putative protein	3.1
AT5G61020	putative protein	2.1
AT5G62100	putative protein	-4.8
AT5G62150	putative protein	2.0
AT5G62290	putative protein	2.0
AT5G62440	putative protein	2.5
AT5G63130	unknown protein	2.4
AT5G63160	putative protein	-2.0
AT5G63240	putative protein	2.5
AT5G63250	putative protein	7.5
AT5G63270	putative protein	-2.4
AT5G63340	unknown protein	-5.0
AT5G63760	putative protein	2.3
AT5G63880	unknown protein	2.6
AT5G64010	unknown protein	-2.1
AT5G64680	unknown protein	2.8
AT5G64770	unknown protein	-2.4
AT5G64810	predicted protein;	2.1
AT5G65920	unknown protein;	2.0
AT5G66580	putative protein	-2.7
AT5G66820	unknown protein	2.3
AT5G66860	putative protein	2.1
AT5G67020	putative protein	-3.8
AT5G67210	putative protein	-3.9
AT5G67340	putative protein	3.9
AT5G67490	unknown protein	2.6
AT5G67620	unknown protein	3.8

^aAverage channel intensity ratio of ARR2^{D80E} overexpressors over ARR2 overexpressors