

Supplementary Table 3. Cytokinin regulation of rice orthologs of the advanced core set of cytokinin-induced genes in Arabidopsis. This table is based on Table 2a. The comparison between Arabidopsis and rice is based on the evaluation of two publicly available rice microarray experiments containing cytokinin-induced samples downloaded from the GEO database under the accessions GSE6719 and GSE55902. The Arabidopsis genes listed here are induced by cytokinin treatment and found in at least three of four data sources (see Figure 1). Genes induced in all four data sources are marked with a grey background.

AGI	Gene symbol	Description	Rice ortholog(s) assigned by WhETS [1] and by reciprocal BLAST		Regulated in rice dataset...
			TIGR ID	RAP ID	
AT1G03850	<i>GRXS13</i>	glutaredoxin 13	LOC_Os01g47760 LOC_Os01g13950	Os01g0667900 Os01g0241400	no no
AT1G04250	<i>IAA17; AXR3</i>	indole-3-acetic acid inducible 17; auxin resistant 3	LOC_Os01g08320 LOC_Os05g08570 LOC_Os06g39590 LOC_Os12g40890 LOC_Os03g43400	Os01g0178500 Os05g0178600 Os06g0597000 Os12g0601300 Os03g0633500	no no no no no
AT1G10470	<i>ARR4</i>	type-A response regulator 4	LOC_Os11g04720 no ID LOC_Os01g72330	Os11g0143300 Os12g0139400 Os01g0952500	no no GSE6719 root 30, GSE6719 root 120, GSE6719 leaf 120, GSE55902
AT1G12740	<i>CYP87A2</i>	cytochrome P450, family 87, subfamily A, polypeptide 2	LOC_Os02g45280 LOC_Os03g45519 LOC_Os03g45619 LOC_Os04g48170 LOC_Os04g48200 LOC_Os04g48210 LOC_Os07g29960 LOC_Os10g10040 LOC_Os10g19110 LOC_Os10g19140 LOC_Os11g18570 LOC_Os12g18820 no ID	no ID Os03g0658100 Os03g0658800 Os04g0570000 Os04g0570500 Os04g0570600 no ID no ID Os10g0337100 Os10g0337100 Os11g0289700 no ID Os07g0482975	no no no no GSE6719 leaf 30 no no no no no no no no no
AT1G13420	<i>ST4B</i>	sulfotransferase 4B	LOC_Os07g05450 LOC_Os11g04540 LOC_Os04g44460 LOC_Os06g42120	no ID Os12g0137900 Os04g0526300 Os06g0626600	no no no no
AT1G16530	<i>ASL9; LBD3</i>	asymmetric leaves 2-like 9; LOB domain-containing protein 3	no rice ortholog		
AT1G17190	<i>GSTU26</i>	glutathione S-transferase tau 26	no rice ortholog		
AT1G19050	<i>ARR7</i>	type-A response regulator7	no rice ortholog		
AT1G28100		unknown protein	LOC_Os10g35644	Os10g0499600	no
AT1G31320	<i>LBD4</i>	LOB domain-containing protein 4	LOC_Os03g45750	Os03g0659700	no
AT1G58170		disease resistance-responsive (dirigent-like protein) family protein	no rice ortholog		no

AT1G59940	<i>ARR3</i>	type-A response regulator 3	LOC_Os02g42060 LOC_Os02g58350 LOC_Os04g36070 LOC_Os04g44280 LOC_Os07g26720 LOC_Os08g28900	no ID Os02g0830200 Os04g0442300 Os04g0524300 no ID no ID	no no GSE6719 root 120, GSE6719 leaf 120, GSE55902 no no no
AT1G66800		cinnamyl-alcohol dehydrogenase, putative	no rice ortholog		
AT1G67110	<i>CYP735A2</i>	cytochrome P450, family 735, subfamily A, polypeptide 2	LOC_Os06g09210 LOC_Os08g33300 LOC_Os09g23820	no ID no ID Os09g0403300	no no no
AT1G69040	<i>ACR4</i>	ACT domain repeat 4	LOC_Os03g29980 LOC_Os08g42100 LOC_Os03g40100 LOC_Os04g32110	Os03g0413100 Os08g0533600 Os03g0598100 Os04g0391500	no GSE55902 no no
AT1G69530	<i>EXPA1</i>	expansin A1	LOC_Os01g60770 LOC_Os05g39990 LOC_Os01g14650 LOC_Os02g51040	Os01g0823100 Os05g0477600 Os01g0248900 Os02g0744200	GSE6719 leaf 120 GSE6719 leaf 120 no no
AT1G72140		major facilitator superfamily protein	LOC_Os01g65140	no ID	no
AT1G75440	<i>UBC16</i>	ubiquitin-conjugating enzyme 16	no rice ortholog		
AT1G75450	<i>CKX5</i>	cytokinin oxidase 5	LOC_Os01g10110 LOC_Os01g56810 LOC_Os06g37500	Os01g0197600 Os01g0775400 no ID	GSE6719 root 120, GSE6719 leaf 120 GSE6719 root 120 no
AT1G78120	<i>TPR12</i>	tetratricopeptide repeat 12	no rice ortholog		
AT2G01830	<i>CRE1; AHK4</i>	cytokinin response 1; arabidopsis histidine kinase 4	LOC_Os02g50480 LOC_Os03g50860 LOC_Os07g38910	no ID Os03g0717700 no ID	no no GSE6719 leaf 120
AT2G01890	<i>PAP8</i>	purple acid phosphatase 8	LOC_Os03g13540 LOC_Os10g02750 LOC_Os11g34720	Os03g0238600 Os10g0116800 Os11g0549620	no GSE6719 root 30, GSE6719 root 120 no
AT2G17500	<i>PILS5</i>	auxin efflux carrier family protein	LOC_Os09g38130 no ID	Os09g0554300 Os09g0555100	GSE6719 leaf 30 no
AT2G25160	<i>CYP82F1</i>	cytochrome P450, family 82, subfamily F, polypeptide 1	no rice ortholog		
AT2G34610		unknown protein	no rice ortholog		
AT2G35980	<i>YLS9; NHL10</i>	yellow-leaf-specific gene 9; NDR1/HIN1-like 10	LOC_Os01g64470 LOC_Os04g58850	Os01g0864500 Os04g0685300	no no
AT2G38750	<i>ANNAT4</i>	annexin 4	LOC_Os05g31750	Os05g0382600	no
AT2G38760	<i>ANNAT3</i>	annexin 3	LOC_Os05g31760 LOC_Os07g46550	Os05g0382900 no ID	no no
AT2G40670	<i>ARR16</i>	type-A response regulator 16	no rice ortholog		
AT2G41310	<i>ARR8</i>	type-A response regulator 8	LOC_Os08g26990 LOC_Os08g28950 LOC_Os11g04720	no ID no ID Os11g0143300	no no no
AT2G46310	<i>CRF5</i>	cytokinin response factor 5	LOC_Os05g25260	Os05g0316800	no

AT2G46660	<i>EOD3; CYP78A6</i>	enhancer of DA1-1 3	LOC_Os03g04190 LOC_Os08g43390 LOC_Os09g35940	Os03g0134566 Os08g0547300 Os09g0528700	no GSE6719 leaf 120 no
AT3G29250	<i>SDR4</i>	short-chain dehydrogenase reductase 4	LOC_Os03g61740	Os03g0833100	no
AT3G29575	<i>AFP3</i>	ABI five binding protein 3	LOC_Os03g30570 LOC_Os07g41160	Os03g0419100 Os07g0602900	no no
AT3G44990	<i>XTR8</i>	xyloglucan endo-transglucosylase-related 8	LOC_Os10g39840 LOC_Os03g01800	Os10g0545500 Os03g0108300	no no
AT3G45070		P-loop containing nucleoside triphosphate hydrolases superfamily protein	LOC_Os01g20950 LOC_Os04g29000 LOC_Os08g20130 LOC_Os08g40380 LOC_Os09g38239 LOC_Os10g11270 LOC_Os11g04530 LOC_Os12g04320 LOC_Os11g30890 LOC_Os12g04350 LOC_Os12g04320	Os01g0311600 Os04g0359300 Os08g0297800 Os08g0515000 Os09g0555150 Os10g0190100 Os12g0137600 Os12g0137700 no ID no ID Os01g0311600	no no no no GSE6719 root 120 no no no no no no
AT3G45700		major facilitator superfamily protein	LOC_Os05g27304	Os05g0338933	no
AT3G48100	<i>ARR5</i>	type-A response regulator 5	no rice ortholog		
AT3G50300		HXXXD-type acyl-transferase family protein	no rice ortholog		
AT3G54720	<i>AMP1</i>	altered meristem program 1	LOC_Os01g54010 LOC_Os03g57660	Os01g0743300 Os03g0790600	no GSE6719 root 30
AT3G57010		Calcium-dependent phosphotriesterase superfamily protein	no rice ortholog		
AT3G57040	<i>ARR9</i>	type-A response regulator 9	LOC_Os01g72330 LOC_Os02g35180 LOC_Os07g26720 LOC_Os11g04720 LOC_Os12g04500 no ID	Os01g0952500 Os02g0557800 no ID Os11g0143300 no ID Os12g0139400	GSE6719 root 30, GSE6719 root 120, GSE6719 leaf 120, GSE55902 GSE6719 leaf 120 no no no no
AT3G62930		thioredoxin superfamily protein	no rice ortholog		
AT4G03610		metallo-hydrolase/oxidoreductase superfamily protein	no rice ortholog		
AT4G11190		disease resistance-responsive (dirigent-like protein) family protein	no rice ortholog		
AT4G15660		thioredoxin superfamily protein	no rice ortholog		
AT4G15680		thioredoxin superfamily protein	LOC_Os01g27140 LOC_Os12g35330	Os01g0368900 Os12g0538600	no no
AT4G19030	<i>NLM1</i>	NOD26-like intrinsic protein 1;1	LOC_Os02g13870 LOC_Os01g10600	Os02g0232900 Os01g0202800	GSE6719 leaf 30 no
AT4G23750	<i>CRF2; TMO3</i>	cytokinin response factor 2; target of monopteros 3	LOC_Os01g12440 LOC_Os06g06540	Os01g0224100 no ID	no no
AT4G29690		alkaline-phosphatase-like family protein	LOC_Os01g10020	Os01g0196600	no
AT4G29700		alkaline-phosphatase-like family protein	LOC_Os01g10020	Os01g0196600	no
AT4G29740	<i>CKX4</i>	cytokinin oxidase 4	LOC_Os02g12770	no ID	no
AT5G05860	<i>UGT76C2</i>	UDP-glucosyl transferase 76C2, cytokinin N-glucosyltransferase	LOC_Os07g13800	Os07g0241700	no

AT5G14070	ROXY2	glutaredoxin ROXY2	LOC_Os02g30850	Os02g0512400	GSE6719 leaf 30
AT5G19110		Eukaryotic aspartyl protease family protein	no rice ortholog		
AT5G19260	FAF3	fantastic four 3	LOC_Os02g30850	Os05g0390300	no
AT5G26260		TRAF-like family protein	no rice ortholog		
AT5G42590	MRO; CYP71A16	marneral oxidase	LOC_Os06g43470 LOC_Os06g43510	Os06g0641900 Os06g0642500	no GSE6719 leaf 30, GSE6719 leaf 120
AT5G47950		HXXXD-type acyl-transferase family protein	no rice ortholog		
AT5G47980		HXXXD-type acyl-transferase family protein	no rice ortholog		
AT5G47990	THAD; CYP705A5	thalian-diol desaturase	no rice ortholog		
AT5G48000	THAH; CYP708A2	thalianol hydroxylase	no rice ortholog		
AT5G48010	THAS	thalianol synthase	no rice ortholog		
AT5G60890	ATR1; MYB34	altered tryptophan regulation 1; MYB domain protein 34	no rice ortholog		
AT5G62920	ARR6	type-A response regulator 6	LOC_Os04g57720	Os04g0673300	GSE6719 root 30, GSE6719 leaf 120

1. Mitchell, R.A.C., et al., *Wheat Estimated Transcript Server (WhETS): a tool to provide best estimate of hexaploid wheat transcript sequence*. Nucleic Acids Research, 2007. **35**(suppl 2): p. W148-W151.