

**Table 2S:**

Overview of transcripts that are at least two-fold down- or up-regulated in both replicate experiments with DTT.

*control*: RMA normalised intensity value for the control incubation. *DTT*: RMA normalised intensity value for the DTT treated tissue. *call*: the present (P) or absent (P) call as defined by the MAS5 analyses software. *ratio*: DTT to control ratio of the normalised intensity values. *Log2[ratio]*: log2 transformed value of the ratio. The *average log2[ratio]* and its *p-value* are calculated using the AfflymGUI software package from Bioconductor.

ATH1 code	replica 1				replica 2				average		annotation Tigr5				
	control	call	DTT	ratio	control	call	DTT	ratio	log2[ratio]	p-value					
266743_at	702	P	97	M	0.14	-2.85	551	P	78	A	0.14	-2.82	-2.8357	0.000	At2g02990: ribonuclease 1 (RNS1)
261177_at	1007	P	131	P	0.13	-2.94	378	P	116	P	0.31	-1.71	-2.3240	0.017	At1g04770: male sterility MS5 family protein
267645_at	1063	P	151	P	0.14	-2.82	722	P	216	P	0.30	-1.74	-2.2782	0.003	At2g32860: glycosyl hydrolase family 1 protein
245151_at	962	P	335	P	0.35	-1.52	538	P	122	P	0.23	-2.15	-1.8326	0.053	At2g47550: pectinesterase family protein
245317_at	2922	P	1186	P	0.41	-1.30	870	P	210	P	0.24	-2.05	-1.6744	0.228	At4g15610: integral membrane family protein
249752_at	398	P	101	P	0.25	-1.98	427	P	185	P	0.43	-1.21	-1.5911	0.013	At5g24660: expressed protein
260438_at	366	P	134	P	0.37	-1.45	234	P	79	P	0.34	-1.56	-1.5048	0.022	At1g68290: bifunctional nuclease, putative
255261_s_at	1884	P	610	P	0.32	-1.63	1394	P	554	P	0.40	-1.33	-1.4789	0.003	At4g05110: equilibrative nucleoside transporter, putative (ENT6); At4g05120: equilibrative nucleoside
246944_at	1565	P	699	P	0.45	-1.16	963	P	286	P	0.30	-1.75	-1.4578	0.068	At5g25450: ubiquinol-cytochrome C reductase complex 14 kDa protein, putative
260528_at	329	P	128	P	0.39	-1.37	273	P	101	P	0.37	-1.44	-1.4018	0.003	At2g47260: WRKY family transcription factor
250448_at	589	P	167	P	0.28	-1.82	396	P	193	P	0.49	-1.04	-1.4253	0.007	At5g10820: integral membrane transporter family protein
255284_at	608	P	195	P	0.32	-1.64	571	P	270	P	0.47	-1.08	-1.3595	0.004	At4g04610: 5'-adenylylsulfate reductase (APR1) / PAPS reductase homolog (PRH19)
256177_at	683	P	247	P	0.36	-1.46	559	P	243	P	0.44	-1.20	-1.3314	0.002	At1g51620: protein kinase family protein
248812_at	494	P	258	P	0.52	-0.93	542	P	151	P	0.28	-1.84	-1.3893	0.015	At5g47330: palmitoyl protein thioesterase family protein
247730_at	197	P	93	A	0.47	-1.08	238	P	79	A	0.33	-1.59	-1.3351	0.002	At5g59580: UDP-glucuronosyl/UDP-glucosyl transferase family protein
259375_at	2149	P	499	P	0.23	-2.11	3385	P	1952	P	0.58	-0.79	-1.4505	0.148	At3g16370: GDSL-motif lipase/hydrolase family protein
252437_at	1115	P	538	P	0.48	-1.05	628	P	219	P	0.35	-1.52	-1.2877	0.102	At3g47380: invertase/pectin methylesterase inhibitor family protein
266089_at	2242	P	1045	P	0.47	-1.10	1280	P	498	P	0.39	-1.36	-1.2323	0.083	At2g38010: ceramidase family protein
246463_at	1475	P	595	P	0.40	-1.31	1172	P	567	P	0.48	-1.05	-1.1793	0.003	At5g16970: NADP-dependent oxidoreductase, putative (P1)
251895_at	3057	P	1391	P	0.45	-1.14	1573	P	684	P	0.43	-1.20	-1.1692	0.104	At3g54420: class IV chitinase (CHIV)
252984_at	386	P	160	A	0.42	-1.27	253	P	124	A	0.49	-1.03	-1.1466	0.020	At4g37990: mannitol dehydrogenase, putative (ELI3-2)
260386_at	343	P	176	A	0.51	-0.96	263	P	107	A	0.41	-1.30	-1.1290	0.030	At1g74010: strictosidine synthase family protein
264749_at	209	P	91	P	0.44	-1.19	251	P	123	P	0.49	-1.03	-1.1108	0.009	At1g22830: pentatricopeptide (PPR) repeat-containing protein
245181_at	220	P	109	P	0.50	-1.01	120	P	53	P	0.44	-1.17	-1.0911	0.111	At5g12420: expressed protein
250365_at	96	P	39	P	0.41	-1.30	222	P	119	P	0.54	-0.90	-1.1004	0.231	At5g11410: protein kinase family protein
265411_at	339	P	157	P	0.46	-1.11	341	P	165	P	0.48	-1.05	-1.0801	0.001	At2g16630: proline-rich family protein
257093_at	263	P	131	P	0.50	-1.01	253	P	116	P	0.46	-1.13	-1.0706	0.002	At3g20570: plastocyanin-like domain-containing protein
249283_at	2521	P	1259	P	0.50	-1.00	1839	P	846	P	0.46	-1.12	-1.0610	0.028	At5g41800: amino acid transporter family protein
260551_at	744	P	341	P	0.46	-1.13	694	P	357	P	0.51	-0.96	-1.0439	0.001	At2g43510: trypsin inhibitor, putative

  

ATH1 code	replica 1				replica 2				average		annotation Tigr5				
	control	call	DTT	ratio	control	call	DTT	ratio	log2[ratio]	p-value					
253228_at	216	P	2242	P	10.39	3.38	261	P	1739	P	6.67	2.74	3.0580	0.000	At4g34630: expressed protein
247293_at	71	P	746	P	10.54	3.40	64	P	258	P	4.06	2.02	2.7102	0.013	At5g64510: expressed protein
253687_at	212	P	1969	P	9.27	3.21	210	P	803	P	3.82	1.93	2.5729	0.009	At4g29520: expressed protein
261485_at	352	P	2427	P	6.89	2.78	261	P	1370	P	5.25	2.39	2.5889	0.003	At1g14360: UDP-galactose/UDP-glucose transporter, putative
247494_at	950	P	6367	P	6.71	2.75	614	P	2236	P	3.64	1.86	2.3046	0.026	At5g61790: calnexin 1 (CNX1)
245956_s_at	2004	P	12563	P	6.27	2.65	1457	P	4689	P	3.22	1.69	2.1676	0.024	At5g42020: luminal binding protein 2 (BiP-2) (BP2); At5g28540: luminal binding protein 1 (BiP-1) (BP1)
256911_at	61	A	424	P	6.97	2.80	64	P	127	P	1.99	0.99	1.8973	0.053	At3g24090: glucosamine--fructose-6-phosphate aminotransferase (isomerizing), putative /
267483_at	271	P	1451	P	5.35	2.42	167	P	585	P	3.50	1.81	2.1118	0.025	At2g02810: UDP-galactose/UDP-glucose transporter
250930_at	136	P	779	P	5.71	2.51	141	P	374	P	2.66	1.41	1.9640	0.012	At5g03160: DNAJ heat shock N-terminal domain-containing protein
259757_at	287	P	1374	P	4.79	2.26	136	P	287	P	2.11	1.08	1.6687	0.161	At1g77510: protein disulfide isomerase, putative
249944_at	101	P	464	P	4.60	2.20	99	P	201	P	2.04	1.03	1.6147	0.031	At5g22290: no apical meristem (NAM) family protein
250625_at	73	P	293	P	4.03	2.01	64	P	126	P	1.96	0.97	1.4929	0.041	At5g07340: calnexin, putative
251182_at	1865	P	6013	P	3.22	1.69	819	P	2262	P	2.76	1.46	1.5767	0.096	At3g62600: DNAJ heat shock family protein
266869_at	131	P	396	P	3.02	1.59	157	P	329	P	2.09	1.06	1.3286	0.003	At2g44660: ALG6, ALG8 glycosyltransferase family protein
248327_at	401	P	860	P	2.14	1.10	553	P	1189	P	2.15	1.11	1.1030	0.019	At5g52750: heavy-metal-associated domain-containing protein