

Table 3 The stress responsive genes identified by this study and at least 2 of the 3 studies used for comparisons are shown (Girardot et al 2004; Landis et al 2004; Kristensen et al 2005). Table shows Affymetrix ID and corresponding gene symbol, maximum expression change after stress (increase for early- and late-up clusters and decrease for early-down cluster) in expression fold change and chromosomal position. Furthermore, the genes belonging to significant GO terms identified by EASE have been marked with appropriate GO term. Finally, known or suspected connection to (heat) stress has been indicated in italics

AFFYID	Symbol	FC	Position	Significant stress GO
A. Early-up				
143198.at	Hsp83	1.53	3L63B11	heat shock protein activity
142836.at	Hsp22	32.26	3L67B1	<i>Hsp</i>
153307.at	Hsp27	3.55	3L67B3	<i>Hsp</i>
153583.at	Hsp23	91.81	3L67B2	heat shock protein activity
153731.at	Hsp26	3.01	3L67B1-67B2	heat shock protein activity
149222.at	CG7130	3.96	3L79B2	heat shock protein activity
143197.at	Hsp68	53.93	3R95D11	heat shock protein activity
151036.f.at	Hsp70Bbb	4.51	3R87B14	<i>Hsp</i>
149782.at	Hsp70Bc	13.26	3R87B14-87B15	heat shock protein activity
153941.at	Fst	1.14	3R85E2	<i>response to cold</i>
152598.at	GstE1	3.47	2R55C6	glutathione transferase activity; <i>response to oxidative stress</i>
148411.at	CG6781	1.73	3L66D5	glutathione transferase activity
149756.at	GstD2	4.14	3R87B8	glutathione transferase activity
149759.at	GstD5	1.60	3R87B8	glutathione transferase activity
142479.at	Gst3-2	1.76	2R55D4	
151834.at	CG32130	20.76	3L70B2	<i>molecular chaperone regulator-3 (Mus musculus)</i>
143041.l.at	CG11700	1.77	X5E4-5E5	<i>stress response (Saccharomyces cerevisiae)</i>
143299.at	Pepck	1.86	2R55D3	<i>gluconeogenesis</i>
143062.at	ade3	1.23	2L27D4	
152056.at	ref(2)P	2.29	2L37F1	
143690.at	Fdxh	1.86	3L67B1	
143802.at	CG14906	1.22	3R89D6	
154053.at	Trxr-1	1.25	X7D22-7E1	<i>antioxidant activity</i>
154184.at	aay	1.87	3L67B4-67B5	
141233.at	CG5966	4.22	X5D1	
154938.at	CG1583	1.66	X7D16-7D17	
145054.at	CG32597	1.53	X12E4-12E5	
152901.at	CG10383	1.60	2L37A1	
146757.at	CG2065	4.40	2R43E9	
147118.at	CG12374	1.10	2R49D3	
147525.at	CG16898	3.02	2R56F4	
152228.at	Xbp1	1.45	2R57C3-57C4	<i>transcription factor activity</i>
153963.at	CG16971	1.18	3L61B2	
150837.at	Obp99b	1.83	3R99B8	
B. Early-down				
151533.at	CG31148	2.42	3R95A8	catalytic activity
151539.at	CG30359	1.10	2R44D1	
143147.at	Eip71CD	1.06	3L71D3-71D4	catalytic activity, carboxylic acid metabolism
143151.at	Est-6	2.07	3L69A1	catalytic activity
141472.at	Glt	2.00	2L29E3	
143242.at	LvpH	1.63	2R44D1	catalytic activity
152200.at	ry	1.44	3R87D9	catalytic activity; <i>eye pigmentation</i>
143401.at	Uro	1.55	2L28C3	catalytic activity
152559.at	v	1.79	X9F11	catalytic activity
151767.at	Nmdmc	1.26	3R85C3	catalytic activity, carboxylic acid metabolism
151960.at	Myo61F	1.23	3L61F6	
153423.at	Pbprp2	1.31	X19D1	
143775.at	iotaTry	1.73	2R47F5	catalytic activity, peptidase activity
143872.at	Aph-4	1.48	3R100B1	catalytic activity, alkaline phosphatase activity
153432.at	Thor	1.58	2L23F6	<i>immune response</i>
153260.at	Mipp1	1.34	3L73A7-73A9	catalytic activity
142950.at	CG7953	1.76	2L34D7	
142951.at	CG7916	2.02	2L34D7	
144310.at	CG8997	2.01	2L34D7	
152148.at	CG16887	1.64	2L34D6-34D7	
152743.at	CG14629	1.29	X1E1	
144369.at	CG11378	1.74	X1E3	
144614.at	CG14439	1.56	X6C11-6C12	
144675.at	CG2254	1.30	X7D5	catalytic activity
144806.at	CG32687	1.47	X9D2	
144853.at	CG15201	1.90	X10A8	
145153.at	CG33173	1.40	X13E15-13E17	catalytic activity

Table 3 Continued

AFFYID	Symbol	FC	Position	Significant stress GO
145202_at	CG9673	2.02	X_15A2-15A3	catalytic activity, peptidase activity
145235_at	CG5162	1.39	X_15F4	
145412_at	CG12656	1.76	X_19B1	
145449_at	NPC1b	1.73	X_19E5	
152999_at	Iris	1.66	2L_21F1	
145684_at	CG17224	1.38	2L_23C5	catalytic activity
142390_at	CG3246	1.39	2L_23F3	
145779_at	CG3244	1.62	2L_25A6	
152567_at	CG18585	1.50	2L_28C1	
145969_at	CG7025	1.06	2L_28C1	catalytic activity, peptidase activity
145970_at	TepII	1.39	2L_28C1	antibacterial peptide activity
152369_at	CG13095	1.64	2L_29D1-29D3	catalytic activity, peptidase activity
142147_at	CG9466	1.76	2L_29F1	catalytic activity; lysosome
146050_at	CG9468	3.11	2L_29F1	catalytic activity; lysosome
146103_at	CG17633	1.55	2L_30C8	catalytic activity, peptidase activity
146138_at	CG5390	1.31	2L_31D1	catalytic activity, peptidase activity
146184_at	CG17108	1.42	2L_32A4	
146214_at	CG16743	1.44	2L_32C1	
146233_at	hgo	1.24	2L_32D5	catalytic activity, carboxylic acid metabolism
146257_at	CG14935	1.21	2L_33A4	catalytic activity
146311_at	CG9928	1.37	2L_34A6	
146323_at	CG5945	1.96	2L_34A11	
146387_at	CG6012	1.29	2L_36B2	catalytic activity
146449_at	Irk3	1.30	2L_37A1	
146486_at	CG13086	1.83	2L_37D2	
141465_at	CG10026	1.43	2L_37E1	
152470_at	CG10189	1.18	2L_37E4	
146526_at	CG10680	1.49	2L_38A8	
146569_at	CG9259	1.99	2L_39A1	
146660_at	CG7882	1.68	2R_42A1	glucose transporter activity
151882_at	CG3270	1.41	2R_42C5	
146742_at	CG30502	1.66	2R_43C3	
146808_at	CG8693	1.67	2R_44D1	catalytic activity
154318_at	Cyp6a13	1.61	2R_44D3	cytochrome P450 activity
151956_at	CG1809	1.34	2R_45F3	catalytic activity, alkaline phosphatase act
147014_at	lambdaTry	1.92	2R_47F3	catalytic activity, peptidase activity
147028_Lat	CG30035	1.28	2R_48B6-48B7	glucose transporter activity
154772_at	sug	1.39	2R_49E1	
147235_at	CG8093	2.42	2R_51E7	catalytic activity; triacylglycerol lipase activity
147265_at	CG8249	1.40	2R_52C8	glucose transporter activity
147319_at	CG8317	1.59	2R_53C9	
147336_at	CG6426	1.17	2R_53D14	
151800_at	CG4847	1.38	2R_54C1	catalytic activity, peptidase activity
142386_at	CG6484	1.50	2R_54C10	glucose transporter activity
147434_at	CG17522	1.34	2R_55C6	catalytic activity; glutathione transferase activity
154747_at	Jheh3	1.21	2R_55F8	catalytic activity; microsome
147514_at	Obp56a	1.45	2R_56E2	
152785_at	CG11200	1.18	2R_56F16	catalytic activity
147544_at	Obp57c	1.39	2R_57A4	
147564_at	CG16799	1.33	2R_57A9	catalytic activity; immunity protein activity
152027_at	Ance-5	2.34	2R_60E5	catalytic activity, peptidase activity
152648_at	CG2736	1.60	2R_60E10-60E11	defense response; scavenger receptor activity
152830_at	CG3344	1.79	3L_61C8	catalytic activity, peptidase activity
148048_at	CG16762	1.83	3L_62E3	
148054_at	CG16985	1.45	3L_62E7	
148055_at	CG16986	1.22	3L_62E7	
148228_at	CG10592	1.77	3L_64D5	catalytic activity, alkaline phosphatase activity
151980_at	CG5150	1.87	3L_64D5	catalytic activity, alkaline phosphatase activity
148251_at	CG10477	1.62	3L_65A3	catalytic activity, peptidase activity
152006_at	CG10472	1.35	3L_65A5	catalytic activity, peptidase activity
148422_at	CG5804	2.00	3L_66E1	carboxylic acid metabolism
148428_at	CG13309	2.51	3L_66E1	
148678_at	CG14120	1.82	3L_69E8	
148963_at	CG6298	1.69	3L_74D3-74D4	catalytic activity, peptidase activity
148976_at	CG5582	1.99	3L_75A4	
151832_at	Oat	1.69	3L_76B11	catalytic activity, carboxylic acid metabolism
141437_at	CG5618	1.32	3L_77B5	catalytic activity

Table 3 Continued

AFFYID	Symbol	FC	Position	Significant stress GO
151894_at	CG18249	1.73	3R_84F4	
149491_at	CG7443	1.81	3R_84F12	
149610_at	CG12813	2.42	3R_85F8	
141327_at	CG8773	1.76	3R_87E4	catalytic activity, peptidase activity
152779_at	CG8774	1.80	3R_87E4-87E5	catalytic activity, peptidase activity
149938_at	CG3984	1.50	3R_88E2	
149964_at	CG14872	1.58	3R_88F7	
154786_at	CG18522	1.45	3R_88F7	
152227_at	CG6126	1.26	3R_89B7	
141483_at	CG17836	1.30	3R_91D4-91D5	
150191_at	CG3734	2.16	3R_92A3	catalytic activity, peptidase activity
152841_at	CG5023	1.35	3R_92D2-92D3	
151819_at	CG3301	1.36	3R_93D2-93D3	catalytic activity
150403_at	CG6660	1.18	3R_94D3-94D4	
150421_at	CG6726	1.42	3R_94D13	catalytic activity
150424_at	CG6733	1.69	3R_94D13	catalytic activity
150482_at	CG13607	1.57	3R_95E1	
152513_at	CG10513	2.07	3R_96C8-96C9	
150576_at	CG10514	2.08	3R_96C9	
150577_at	CG31104	1.07	3R_96C9	
151781_at	CG5107	1.43	3R_96E2	
150699_at	CG6295	1.49	3R_97D13	catalytic activity; triacylglycerol lipase activity
150732_at	Cyp6a18	1.86	3R_98A2	cytochrome P450 activity
142206_s.at	CG14527	1.77	3R_98F1	catalytic activity, peptidase activity
142413_at	CG11314	1.46	3R_100A3	
142414_at	CG11315	1.27	3R_100A3	
151069_at	CG5791	1.62	3R_94A2	
151094_at	CG3348	2.16	3R_97F1	
151209_at	CG15065	1.72	2R_55C6	
C. Late-up				
143201_at	ImpL3	1.90	3L_65A11	glycolysis
143243_at	LvpL	2.89	2R_44D1	alpha-glucosidase activity; glucose metabolism
143276_at	MtnA	7.13	3R_85E9	
151805_at	Reg-3	1.93	X_8D8-8D9	
144701_at	CG12116	2.70	X_7F1	
152289_at	CG3106	5.84	X_8F6	
142953_at	CG9675	1.86	X_15A1-15A2	peptidase activity
145816_at	Cyp4ac2	1.58	2L_25D2	cytochrome P450 activity; microsome
152813_at	CG9497	1.94	2L_26C3	
152958_at	Cyp4d21	3.41	2L_28B4	cytochrome P450 activity; microsome
153012_at	CG7300	2.66	2L_32A4	
146190_at	CG17124	2.32	2L_32A5	protein phosphatase inhibitor activity
146763_at	CG1946	5.34	2R_43E12	
146991_at	CG9080	4.23	2R_47E1	
147093_at	CG8834	1.62	2R_49A4	long-chain fatty acid transporter activity
147188_at	CG18327	2.47	2R_50E1	
147636_at	CG13492	1.31	2R_58A2	
155144_at	Cct1	2.08	3L_62A9	
148259_at	CG6602	3.76	3L_65A5	
148332_at	CG8562	2.12	3L_65F11	peptidase activity
152794_at	CG8560	1.95	3L_65F11	peptidase activity
142402_at	CG16749	40.84	3R_85D11	peptidase activity
154821_at	CG8147	1.50	3R_85D18	
149615_at	CG3940	2.13	3R_85F12	
149618_at	1(3)IX-14	2.42	3R_85F14-85F15	peptidase activity
152573_at	CG32919	3.78	3R_87B9	
149899_at	Cyp313a1	2.94	3R_88C4	cytochrome P450 activity; microsome
150192_at	CG18493	16.39	3R_92A3	
150193_at	CG3739	2.15	3R_92A3	peptidase activity
150412_at	CG13833	2.89	3R_94D10	
141409_at	CG6164	2.32	3R_95E5	
150791_at	CG14528	1.28	3R_98F1	peptidase activity
141310_at	CG9682	2.31	3R_99E3	
150901_at	CG9702		3R_99F9	

Go, Gene Ontology.