



Title	Changes in Cell Wall Structure During Rhizoid Formation of <i>Silvetia babingtonii</i> (Fucales, Phaeophyceae) Zygotes
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Table S5. DEGs in 3 h AF vs 10 h AF.

Contig name	a.value	m.value	p.value	q.value	rank	description	Uniprot ID	Organism
comp29434_c0_seq1.p1	-20.930567	29.4887419	2.24E-11	5.79E-07	1			
comp19835_c0_seq1.p1	8.96585572	5.73341624	2.95E-09	3.82E-05	2			
comp30946_c0_seq1.p2	8.53524858	5.61613952	9.71E-09	8.38E-05	3			
comp12763_c0_seq1.p1	8.70953592	5.44809022	1.73E-08	9.80E-05	4			
comp24437_c0_seq1.p2	0.43698535	16.5285844	1.89E-08	9.80E-05	5			
comp29637_c0_seq2.p1	9.13713605	5.27887814	2.36E-08	0.00010193	6			
comp32255_c0_seq10.p1	10.000636	5.06276241	3.35E-08	0.00012401	7			
comp31851_c1_seq1.p1	8.30736012	5.42324803	3.88E-08	0.00012572	8			
comp32609_c0_seq16.p2	9.59980386	5.04536514	4.83E-08	0.00013903	9			
comp30740_c1_seq24.p1	-20.930567	28.3983891	6.72E-08	0.00017396	10	RNA polymerase sigma factor rpoD3	Q310G5	<i>Synechococcus elongatus</i> (strain PCC 7942)
comp12039_c0_seq1.p1	8.66935901	5.14042282	8.37E-08	0.00019711	11			
comp31426_c1_seq11.p1	10.3919691	4.76603864	1.14E-07	0.00024694	12	DnAJ-like protein str0093	P50027	<i>Synechocystis</i> sp. (strain PCC 6803 / Kazusa)
comp31851_c1_seq2.p1	7.84172355	5.255871	2.08E-07	0.00041477	13			
comp30049_c0_seq1.p1	-20.930567	28.1904431	2.73E-07	0.00050481	14	Mitogen-activated protein kinase kinase 2	Q957U9	<i>Arabidopsis thaliana</i>
comp29471_c0_seq2.p1	9.05994903	4.779644	2.97E-07	0.00051243	15	Probable E3 ubiquitin-protein ligase HERC1	Q15751	<i>Homo sapiens</i>
comp31851_c1_seq4.p1	7.05961882	5.47305219	4.61E-07	0.00074586	16			
comp27441_c0_seq5.p2	9.22841575	4.58849889	6.33E-07	0.00096461	17	Probable urea active transporter 1	O94469	<i>Schizosaccharomyces pombe</i> (strain 972 / ATCC 24843)
comp32647_c0_seq22.p1	7.98304027	4.93098519	6.96E-07	0.0010013	18			
comp28285_c0_seq1.p1	6.76278211	5.41605726	1.51E-06	0.00206085	19			
comp32897_c0_seq8.p1	-1.1325332	18.3337062	1.64E-06	0.00212398	20			
comp31948_c0_seq11.p1	5.02012245	7.01401068	2.18E-06	0.00266857	21	Calcium/calmodulin-dependent protein kinase	P11730	<i>Rattus norvegicus</i>
comp27441_c0_seq8.p1	9.49036547	4.25884701	2.33E-06	0.00266857	22	Probable urea active transporter 1	O94469	<i>Schizosaccharomyces pombe</i> (strain 972 / ATCC 24843)
comp30731_c0_seq2.p1	-20.930567	27.8543449	2.37E-06	0.00266857	23			
comp30809_c0_seq1.p1	10.0791373	4.14718641	2.63E-06	0.00283177	24			
comp32125_c0_seq11.p2	6.82734466	5.20533236	3.17E-06	0.00328411	25	NEDD4-like E3 ubiquitin-protein ligase WW	B8ZBZ3	<i>Mus musculus</i>
comp32537_c0_seq3.p1	11.7401026	3.93774902	3.97E-06	0.00395107	26	Catalase-peroxidase	B4RW28	<i>Altromonas macleodii</i> (strain DSM 17117 / Deep ecotype)
comp25257_c0_seq2.p1	9.72257003	4.07691987	4.60E-06	0.00441185	27			
comp22476_c0_seq1.p1	9.9065544	4.02519426	5.18E-06	0.00479209	28			
comp13072_c0_seq3.p3	6.65403197	5.19855699	5.38E-06	0.00480094	29			
comp31731_c2_seq2.p1	7.33688222	4.7504763	6.17E-06	0.00532781	30	Putative RNA (cytidine(34)-2'-O)-methyltra	Q042B4	<i>Lactobacillus gasserii</i> (strain ATCC 33323 / DSM 20243)
comp24503_c0_seq3.p1	11.0032373	3.86107918	6.77E-06	0.00565312	31			
comp32527_c0_seq6.p1	8.23908367	4.33697804	7.07E-06	0.00572291	32			
comp19956_c0_seq1.p1	7.23365678	4.7590348	7.31E-06	0.00573881	33			
comp21979_c1_seq1.p1	9.49374701	3.99210007	8.03E-06	0.00594971	34			
comp32615_c1_seq31.p1	6.49897777	5.18436999	8.04E-06	0.00594971	35			
comp29480_c0_seq3.p1	7.66554891	4.50646885	8.89E-06	0.00639563	36	Short transient receptor potential channel 4	Q9QUQ5	<i>Mus musculus</i>
comp31297_c0_seq1.p1	7.55473228	4.50410258	1.12E-05	0.00785173	37			
comp27949_c0_seq1.p1	8.88952567	4.00376435	1.32E-05	0.0090242	38			
comp30780_c0_seq2.p1	-20.930567	27.5540865	1.39E-05	0.00920385	39	Serine/threonine-protein kinase/endoribonuc	P32361	<i>Saccharomyces cerevisiae</i> (strain ATCC 204508 / S288c)
comp12509_c0_seq1.p1	8.19367957	4.18906395	1.42E-05	0.00921778	40	Alcohol dehydrogenase	P42327	<i>Geobacillus stearothermophilus</i>
comp32240_c0_seq4.p1	10.7586465	3.7105402	1.47E-05	0.00927716	41			
comp19957_c0_seq2.p1	8.54265768	4.05694517	1.57E-05	0.0096543	42			
comp12933_c0_seq1.p1	10.8451805	3.68411959	1.61E-05	0.00968632	43	Probable serine/threonine-protein kinase CC	P0C8M8	<i>Zea mays</i>
comp29173_c0_seq1.p1	9.13413819	3.9002034	1.65E-05	0.00968652	44			
comp32905_c0_seq22.p1	9.94727995	3.75143637	1.76E-05	0.00998157	45			
comp34050_c0_seq1.p1	9.6870957	3.78175048	1.81E-05	0.00998157	46			
comp32812_c1_seq1.p1	8.34223185	4.07910172	1.85E-05	0.00998157	47	Probable glutamine amidotransferase DUG3	P53871	<i>Saccharomyces cerevisiae</i> (strain ATCC 204508 / S288c)
comp31368_c0_seq3.p1	11.3892808	3.61801302	1.87E-05	0.00998157	48			
comp26119_c0_seq1.p1	7.89820952	4.23438524	1.89E-05	0.00998157	49			
comp29838_c1_seq2.p1	5.54327787	5.80141012	2.04E-05	0.01038078	50	D-xylose-proton symporter-like 3, chloropla	Q0WWW9	<i>Arabidopsis thaliana</i>
comp29139_c1_seq2.p1	-5.1362789	25.4810724	2.04E-05	0.01038078	51			
comp32858_c2_seq18.p1	6.8342241	4.640078	3.31E-05	0.01530986	52			
comp32024_c0_seq4.p1	7.39019174	4.32413227	3.32E-05	0.01530986	53			
comp24321_c0_seq2.p2	9.15214655	3.73714877	3.32E-05	0.01530986	54	Xylosyltransferase sqv-6	Q5QQ52	<i>Caenorhabditis briggsae</i>
comp29876_c0_seq1.p1	8.23397561	3.97879515	3.33E-05	0.01530986	55			
comp29543_c0_seq1.p1	9.80376259	3.62474235	3.37E-05	0.01530986	56	UPF0187 protein atr2987	Q8YSU5	<i>Nostoc</i> sp. (strain PCC 7120 / UTEX 2576)
comp30494_c2_seq3.p1	8.26644278	3.96574123	3.37E-05	0.01530986	57			
comp32035_c0_seq4.p2	9.31964611	-3.6820317	3.64E-05	0.0162595	58			
comp30844_c0_seq1.p1	6.87837043	4.56853717	3.80E-05	0.01669139	59			
comp26636_c0_seq4.p1	-20.930567	27.345344	4.23E-05	0.01807683	60			
comp13145_c0_seq1.p1	8.67735908	3.7893703	4.26E-05	0.01807683	61	Putative ankyrin repeat protein R873	Q5UP39	<i>Acanthamoeba polyphaga mimivirus</i>
comp11702_c0_seq1.p1	7.94653696	4.01828088	4.35E-05	0.01815779	62	ABC transporter G family member 14	Q9C6W5	<i>Arabidopsis thaliana</i>
comp20554_c0_seq1.p1	10.5558558	3.47355809	4.57E-05	0.01879232	63	Nephrocystin-3	Q7TINH6	<i>Mus musculus</i>
comp30565_c0_seq11.p1	-20.930567	-27.398652	4.73E-05	0.01914779	64	Protein MOS2	Q9C801	<i>Arabidopsis thaliana</i>
comp29535_c0_seq4.p1	-20.930567	27.3170485	4.99E-05	0.0196056	65			
comp29976_c0_seq1.p1	9.18474477	3.63421667	5.04E-05	0.0196056	66			
comp26873_c0_seq1.p1	7.27955346	4.27467428	5.18E-05	0.0196056	67			
comp29899_c0_seq3.p1	1.14342956	12.5748825	5.21E-05	0.0196056	68			
comp25714_c0_seq1.p1	8.61962479	3.75674156	5.23E-05	0.0196056	69			
comp29273_c0_seq1.p1	7.33088761	4.21241826	5.99E-05	0.02214294	70	2-epi-5-epi-valioloene synthase	Q9ZAE9	<i>Actinoplanes</i> sp. (strain ATCC 31044 / CBS 674.73 / SE50/110)
comp32597_c0_seq13.p1	4.106583	7.0724558	6.16E-05	0.02245206	71	Ubiquitin carboxyl-terminal hydrolase 22	A6H8I0	<i>Danio rerio</i>
comp31985_c0_seq1.p1	7.58402381	4.07483447	6.41E-05	0.02266689	72	Uncharacterized protein PB7E8.02	Q9C0V4	<i>Schizosaccharomyces pombe</i> (strain 972 / ATCC 24843)
comp32686_c0_seq5.p1	9.88827885	-3.4631534	6.46E-05	0.02266689	73			
comp32858_c2_seq8.p1	6.99600718	4.3727324	6.48E-05	0.02266689	74	Zinc transporter ZIP10	Q6PEH9	<i>Danio rerio</i>
comp31436_c0_seq2.p1	9.76177964	-3.4713061	6.65E-05	0.02276527	75			
comp14128_c0_seq1.p1	12.0102387	-3.3050771	6.75E-05	0.02276527	76	La-related protein 7	Q05CL8	<i>Mus musculus</i>
comp26937_c0_seq4.p1	4.66124105	-6.4553116	6.77E-05	0.02276527	77	Exportin-7	Q5ZL70	<i>Gallus gallus</i>
comp32374_c0_seq4.p1	4.02651674	-7.1237729	6.90E-05	0.02276767	78	Uncharacterized acyltransferase C1718.04	Q9P7P0	<i>Schizosaccharomyces pombe</i> (strain 972 / ATCC 24843)
comp34646_c0_seq1.p1	8.79576087	3.64428831	6.95E-05	0.02276767	79			
comp32920_c1_seq24.p1	9.8959518	3.43415402	7.32E-05	0.02368625	80	Probable cysteine desulfurase	Q9K7A0	<i>Bacillus halodurans</i> (strain ATCC BAA-125 / DSM 18197 / FERM 7344 / JCM 9153 / C-125)
comp29976_c0_seq2.p1	7.42527806	4.10201488	7.78E-05	0.02485944	81			
comp25609_c0_seq3.p1	7.20094529	4.19905613	8.20E-05	0.02560483	82	Guanine nucleotide-binding protein G(o) sut	O15976	<i>Mtzuhopecten yessoensis</i>
comp33138_c0_seq13.p1	8.55972122	3.66508481	8.23E-05	0.02560483	83	Kinesin-like protein KIF11	B2GU58	<i>Xenopus tropicalis</i>
comp30350_c0_seq4.p1	-20.930567	27.2129637	8.32E-05	0.02560483	84			
comp30402_c0_seq2.p1	6.88498988	4.37276042	8.41E-05	0.02560483	85	ATP-dependent DNA helicase PIF1	Q9H611	<i>Homo sapiens</i>
comp30731_c0_seq3.p1	9.88995729	3.38109115	9.21E-05	0.02751647	86			
comp24536_c0_seq2.p1	3.82255004	7.36664925	9.25E-05	0.02751647	87	Splicing factor U2AF 65 kDa subunit	P90978	<i>Caenorhabditis elegans</i>
comp31844_c0_seq1.p1	-20.930567	27.1923122	9.48E-05	0.02785175	88			
comp32255_c0_seq1.p1	10.9196171	3.27089977	9.75E-05	0.02785175	89			
comp31723_c0_seq9.p1	-20.930567	27.1818969	9.90E-05	0.02785175	90	HBS1-like protein	Q2KH22	<i>Bos taurus</i>
comp31941_c0_seq2.p1	-20.930567	27.1816159	9.90E-05	0.02785175	90.5	Major facilitator superfamily domain-contain	Q8CBH5	<i>Mus musculus</i>
comp26299_c0_seq1.p2*	3.8046629	7.49982562	9.97E-05	0.02785175	92	Poly(beta-D-mannuronate) C5 epimerase	Q88NC9	<i>Pseudomonas putida</i> (strain KT2440)
comp25123_c0_seq2.p1	6.8247824	4.36552452	0.00010005	0.02785175	93	Heat shock factor protein	P22813	<i>Drosophila melanogaster</i>
comp29163_c0_seq6.p1	3.52460409	-7.9694569	0.00010447	0.02870992	94	Dynein heavy chain 1, axonemal	Q63164	<i>Rattus norvegicus</i>
comp30593_c0_seq1.p1	9.32665313	3.43462161	0.00010535	0.02870992	95	Probable outer membrane protein pmp6	Q9Z899	<i>Chlamydia pneumoniae</i>
comp11912_c0_seq2.p1	5.98659327	4.94481634	0.00010826	0.02919519	96			
comp24770_c0_seq1.p1	9.38403747	3.41446435	0.00010995	0.02934518	97			
comp33218_c0_seq21.p2	-20.930567	27.1463968	0.0001181	0.03119968	98	Putative serine protease K12H4.7	P34528	<i>Caenorhabditis elegans</i>
comp33217_c0_seq37.p1	5.77130733	5.09325771	0.00012293	0.03214729	99			
comp32683_c0_seq3.p1	-20.930567	27.1227012	0.00013496	0.03494077	100			
comp32398_c1_seq13.p1	8.07591437	3.66267268	0.00015333	0.03930498	101			
comp32002_c0_seq2.p2*	10.498789	3.17858492	0.00016635	0.04223116	102	GDP-mannose 6-dehydrogenase	P11759	<i>Pseudomonas aeruginosa</i> (strain ATCC 15692 / PAO1 / IC / PRS 101 / LMG 12228)
comp31142_c0_seq4.p1	5.1675788	5.58179446	0.0001697	0.04265446	103	Peptidyl-Asp metalloendopeptidase	B2FQP3	<i>Stenotrophomonas maltophilia</i> (strain KT279a)
comp32647_c0_seq2.p2	7.71612848	3.75384082	0.00018163	0.04521636	104			
comp31338_c0_seq10.p1	8.2178986	3.56251235	0.00018428	0.04543759	105			
comp32035_c0_seq2.p1	9.01631449	-3.3534966	0.00018756	0.04581135	106			
comp32887_c0_seq19.p1	9.92588693	3.19001809	0.00020239	0.04896971	107			

\* confirmation of expression level by RT-qPCR

Table S6. DEGs in 3 h AF vs 24 h AF.

Contig name	a.value	m.value	p.value	q.value	rank	description	Uniprot ID	Organism
comp30946_c0_seq1.p2	10.18803	8.600961466	2.92E-09	7.28E-05	1			
comp24437_c0_seq1.p2	1.408872	18.15161611	5.62E-09	7.28E-05	2			
comp32408_c2_seq24.p1*	-20.9176	29.3619053	1.69E-07	0.001455497	3	Poly(beta-D-mannuronate) C5 epimerase	Q88NC9	<i>Pseudomonas putida</i> (strain KT2440)
comp31851_c1_seq4.p1	7.979959	6.99299002	8.03E-07	0.003855527	4			
comp32647_c0_seq22.p1	9.016417	6.67696719	9.74E-07	0.003855527	5			
comp32167_c4_seq1.p1	-20.9176	28.94082432	9.77E-07	0.003855527	6	RNA-binding protein Musashi homolog 2	Q96DH6	<i>Homo sapiens</i>
comp31608_c0_seq3.p1	7.55588	7.06680202	1.07E-06	0.003855527	7			
comp32096_c0_seq7.p1	6.734351	7.423743109	1.32E-06	0.003855527	8			
comp31851_c1_seq1.p1	9.042802	6.57338988	1.34E-06	0.003855527	9			
comp32647_c0_seq14.p1	8.548829	6.604782698	1.63E-06	0.00400072	10			
comp28285_c0_seq1.p1	7.646199	6.862147978	1.70E-06	0.00400072	11			
comp24510_c0_seq2.p1	6.069545	7.708841048	2.31E-06	0.004980454	12			
comp30049_c0_seq1.p1	-20.9176	28.63170418	3.53E-06	0.007034909	13	Mitogen-activated protein kinase kinase 2	Q9S7U9	<i>Arabidopsis thaliana</i>
comp30350_c0_seq4.p1	-20.9176	28.57674473	4.46E-06	0.008164305	14			
comp30892_c1_seq2.p1	7.931916	6.386459168	4.73E-06	0.008164305	15			
comp33139_c0_seq6.p1	5.537691	7.952891519	6.10E-06	0.009729369	16			
comp32096_c0_seq8.p1	5.268865	8.107480382	6.41E-06	0.009729369	17			
comp29434_c0_seq1.p1	-20.9176	28.47178845	6.87E-06	0.009729369	18			
comp30844_c0_seq1.p1	7.876202	6.24345778	7.14E-06	0.009729369	19			
comp29637_c0_seq2.p1	9.558728	5.801320592	8.87E-06	0.011487304	20			
comp31948_c0_seq11.p1	5.533306	7.71963485	9.69E-06	0.011949093	21	Calcium/calmodulin-dependent protein kinase type II subunit gamma	P11730	<i>Rattus norvegicus</i>
comp32609_c0_seq16.p2	10.06715	5.659315433	1.12E-05	0.012664883	22	HBS1-like protein	Q2KHZ2	<i>Bos taurus</i>
comp19835_c0_seq1.p1	9.14727	5.775502396	1.13E-05	0.012664883	23			
comp33139_c0_seq7.p1	6.135426	6.964730927	1.18E-05	0.012750062	24			
comp32588_c0_seq12.p1	5.849862	7.090472891	1.68E-05	0.017420108	25			
comp32647_c0_seq17.p2	4.529311	8.628372514	1.76E-05	0.017518176	26			
comp31142_c0_seq4.p1	6.01292	6.951734315	1.91E-05	0.018073631	27	Peptidyl-Asp metalloendopeptidase	B2FQP3	<i>Stenotrophomonas maltophilia</i> (strain K279a)
comp31844_c0_seq1.p1	-20.9176	28.21435993	1.95E-05	0.018073631	28			
comp33139_c0_seq25.p1	-20.9176	28.12553854	2.81E-05	0.025095404	29			
comp32255_c0_seq10.p1	10.26248	5.26571539	3.18E-05	0.02740893	30			
comp32814_c0_seq23.p1	-20.9176	-28.27220615	4.17E-05	0.033844999	31			
comp36711_c0_seq1.p1	7.740805	5.650482408	4.24E-05	0.033844999	32			
comp32158_c1_seq28.p1	7.140679	-5.871064106	4.31E-05	0.033844999	33			
comp26636_c0_seq4.p1	-20.9176	27.98698195	4.84E-05	0.036854067	34			
comp32954_c2_seq3.p1	7.139718	5.849187788	4.99E-05	0.03691921	35			
comp32125_c0_seq11.p2	7.267426	5.764753075	5.31E-05	0.037566611	36	NEDD4-like E3 ubiquitin-protein ligase WWP1	Q8BZZ3	<i>Mus musculus</i>
comp31851_c1_seq2.p1	8.099755	5.451192047	5.37E-05	0.037566611	37			
comp26119_c0_seq1.p1	8.587502	5.292228907	5.68E-05	0.038712552	38			
comp30838_c0_seq2.p1	4.980823	7.531396032	5.94E-05	0.03880784	39			
comp29663_c0_seq7.p1	5.581634	6.944639201	6.00E-05	0.03880784	40	Carboxypeptidase N subunit 2	Q9DBB9	<i>Mus musculus</i>
comp32686_c0_seq5.p1	9.225519	-5.109415706	6.55E-05	0.041384858	41			
comp12763_c0_seq1.p1	8.734975	5.178226535	7.05E-05	0.042428858	42			
comp25093_c0_seq1.p1	9.2034	5.090663564	7.06E-05	0.042428858	43			
comp31723_c0_seq9.p1	-20.9176	27.88580389	7.21E-05	0.042428858	44			
comp32780_c1_seq6.p1	4.409353	8.119487104	7.62E-05	0.043573102	45			
comp25257_c0_seq2.p1	10.30884	4.928712766	7.74E-05	0.043573102	46			
comp24681_c0_seq1.p1	10.44553	4.859020302	9.07E-05	0.049985551	47			

\* confirmation of expression level by RT-qPCR



Table S7. DEGs in 10 h AF vs 24 h AF.

Contig name	a.value	m.value	p.value	q.value	rank	description	Uniprot ID	Organism
comp31608_c0_seq3.p1	7.226321857	7.9163	3.83E-26	9.92E-22	1			
comp30892_c1_seq2.p1	7.659291447	7.1221	5.00E-24	6.48E-20	2			
comp32408_c2_seq24.p1*	2.572456685	14.336	5.67E-19	4.89E-15	3	Poly(beta-D-mannuronate) C5 epimerase	Q88NC9	<i>Pseudomonas putida</i> (strain KT2440)
comp32096_c0_seq7.p1	7.273275199	6.5363	1.85E-18	1.20E-14	4			
comp32948_c1_seq4.p1	10.16825089	4.74	3.23E-18	1.67E-14	5			
comp33139_c0_seq4.p1	-20.928435	29.443	6.58E-18	2.84E-14	6			
comp32954_c2_seq4.p1	6.88590588	6.6018	1.62E-16	5.99E-13	7			
comp27318_c0_seq1.p1	7.71102096	5.7158	3.69E-16	1.20E-12	8			
comp30557_c0_seq3.p1	6.654272361	6.6793	7.29E-16	2.10E-12	9			
comp32167_c4_seq1.p1	-20.928435	29.153	1.14E-15	2.95E-12	10	RNA-binding protein Musashi homolog 2	Q96DH6	<i>Homo sapiens</i>
comp31977_c0_seq7.p1	7.018510284	6.2393	1.61E-15	3.80E-12	11	Peptidyl-Asp metalloendopeptidase	B2FPQ3	<i>Stenotrophomonas maltophilia</i> (strain K279a)
comp33151_c0_seq1.p1	10.29681246	4.1404	7.53E-15	1.62E-11	12	Vanadium-dependent bromoperoxidase	P81701	<i>Ascophyllum nodosum</i>
comp32070_c1_seq1.p1	11.36377414	3.7123	1.31E-13	2.61E-10	13			
comp32096_c0_seq8.p1	6.050502326	6.7346	9.95E-13	1.84E-09	14			
comp32647_c0_seq20.p2	6.574400453	6.1117	1.25E-12	2.16E-09	15			
comp27008_c0_seq1.p1	12.28053642	3.2059	2.54E-11	4.11E-08	16	Dual oxidase 2	Q8HZK2	<i>Sus scrofa</i>
comp26937_c0_seq4.p1	5.289985454	7.4108	2.89E-11	4.40E-08	17	Exportin-7	Q5ZL70	<i>Gallus gallus</i>
comp31866_c0_seq20.p1	-20.928435	28.473	3.47E-11	4.99E-08	18			
comp32647_c0_seq14.p1	10.20844931	3.4759	4.43E-11	6.04E-08	19			
comp30946_c0_seq1.p2	13.03909007	3.0894	6.20E-11	8.03E-08	20			
comp33139_c0_seq7.p1	7.198170442	5.0296	1.08E-10	1.33E-07	21			
comp33139_c0_seq25.p1	-20.928435	28.338	2.00E-10	2.35E-07	22			
comp28157_c0_seq3.p1	8.499248706	4.0174	2.35E-10	2.64E-07	23			
comp32737_c2_seq1.p1	6.56962383	5.5419	2.59E-10	2.80E-07	24			
comp33151_c0_seq7.p1	10.4574249	3.2608	2.77E-10	2.86E-07	25	Vanadium-dependent bromoperoxidase	P81701	<i>Ascophyllum nodosum</i>
comp29719_c0_seq4.p1	7.856570421	4.4075	2.88E-10	2.87E-07	26	Ankyrin-3	Q12955	<i>Homo sapiens</i>
comp31490_c1_seq1.p1	8.231663668	4.0919	5.64E-10	5.41E-07	27	Vanadium-dependent bromoperoxidase	P81701	<i>Ascophyllum nodosum</i>
comp32174_c0_seq1.p1	10.6692086	2.9518	5.75E-09	5.31E-06	28			
comp33134_c0_seq9.p1	6.686089724	5.0007	1.01E-08	8.98E-06	29			
comp32814_c0_seq23.p1	-20.928435	-28.12	1.22E-08	1.05E-05	30			
comp32647_c0_seq26.p1	5.397260669	6.3606	1.63E-08	1.36E-05	31			
comp28953_c0_seq2.p1	7.261352941	4.4178	1.83E-08	1.48E-05	32	Flavohemoprotein	Q8ETH0	<i>Oceanobacillus thelyensis</i> (strain DSM 14371 / JCM 11309 / KCTC 3954 / HTE831)
comp32647_c0_seq17.p2	6.368687001	5.14	4.07E-08	3.20E-05	33			
comp24510_c0_seq4.p1	8.182665166	3.673	4.29E-08	3.27E-05	34			
comp32647_c0_seq4.p1	9.29479604	3.1233	4.47E-08	3.31E-05	35			
comp24681_c0_seq1.p1	11.67578516	2.5889	6.52E-08	4.69E-05	36			
comp33037_c0_seq5.p1	12.71910868	-2.507	6.97E-08	4.88E-05	37	WSC domain-containing protein 1	Q505J3	<i>Rattus norvegicus</i>
comp21513_c0_seq2.p1	10.4030795	2.766	7.40E-08	5.04E-05	38	Probable transketolase	Q9URM2	<i>Schizosaccharomyces pombe</i> (strain 972 / ATCC 24843)
comp26164_c0_seq1.p1	6.082122799	5.3239	9.78E-08	6.49E-05	39	HHIP-like protein 1	Q96JK4	<i>Homo sapiens</i>
comp12523_c0_seq1.p1	9.756099424	2.8677	1.35E-07	8.76E-05	40			
comp31476_c0_seq6.p1	-20.928435	27.737	1.53E-07	9.65E-05	41	Fanconi anemia group D2 protein	Q9BXW9	<i>Homo sapiens</i>
comp33139_c0_seq12.p1	-20.928435	27.689	2.36E-07	0.000145283	42			
comp33287_c0_seq7.p1	10.72238388	2.5822	2.61E-07	0.000157002	43	Retrovirus-related Pol polyprotein from transposon TNT 1-94	P10978	<i>Nicotiana tabacum</i>
comp31346_c0_seq7.p1	7.704189935	3.756	2.89E-07	0.000169928	44			
comp33955_c0_seq1.p2	10.6881279	-2.573	3.01E-07	0.000173139	45			
comp17843_c1_seq1.p1	5.678326945	5.5454	4.70E-07	0.000264298	46			
comp12401_c0_seq1.p1	9.57787814	-2.75	6.72E-07	0.000369925	47			
comp32717_c0_seq6.p2	9.829906008	2.6615	7.99E-07	0.000427027	48			
comp33037_c0_seq9.p1	15.73153814	-2.217	8.08E-07	0.000427027	49	WSC domain-containing protein 2	A2BGL3	<i>Danio rerio</i>
comp313093_c0_seq1.p1	9.29479604	3.1233	8.83E-07	0.000457346	50	Probable transketolase	Q9URM2	<i>Schizosaccharomyces pombe</i> (strain 972 / ATCC 24843)
comp32276_c1_seq7.p1	6.592465999	4.4926	9.05E-07	0.000495818	51			
comp30413_c0_seq1.p1	5.869217287	5.2021	1.04E-06	0.000518801	52			
comp25475_c0_seq1.p1	7.523278434	3.6801	1.38E-06	0.000673869	53			
comp30103_c0_seq2.p1	4.51431748	6.8321	1.88E-06	0.000903099	54			
comp30740_c1_seq21.p1	2.561050234	10.112	1.94E-06	0.000915279	55	RNA polymerase sigma factor rpoD4	Q31QR8	<i>Synechococcus elongatus</i> (strain PCC 7942)
comp32588_c0_seq12.p1	7.779065762	3.4224	2.73E-06	0.001259943	56			
comp26763_c0_seq1.p1	8.98087907	2.7976	2.88E-06	0.001307962	57	L-aspartate oxidase	Q51363	<i>Pseudomonas aeruginosa</i> (strain ATCC 15692 / PAO1 / IC / PRS 101 / LMG 12228)
comp32306_c0_seq15.p1	-20.928435	27.389	3.07E-06	0.001369192	58			
comp32794_c0_seq2.p1	-20.928435	27.379	3.44E-06	0.001509442	59			
comp32944_c0_seq11.p1	8.89243574	2.7643	4.99E-06	0.002154316	60			
comp30557_c0_seq5.p1	-20.928435	27.327	5.15E-06	0.002185009	61			
comp32302_c1_seq10.p1	7.675601495	3.3805	5.70E-06	0.002381323	62			
comp32456_c0_seq12.p1	12.92949282	2.0662	6.14E-06	0.002523254	63			
comp29766_c0_seq1.p1	9.878660556	2.406	7.10E-06	0.002873776	64			
comp29117_c0_seq1.p1	11.62634444	2.1067	8.85E-06	0.003523699	65	CBL-interacting serine/threonine-protein kinase 26	Q84VQ3	<i>Arabidopsis thaliana</i>
comp27786_c0_seq1.p1	7.927035752	3.1617	9.16E-06	0.003547728	66			
comp31977_c0_seq8.p1	5.512621691	5.2275	9.18E-06	0.003547728	67	Peptidyl-Asp metalloendopeptidase	B2FPQ3	<i>Stenotrophomonas maltophilia</i> (strain K279a)
comp24972_c0_seq1.p1	6.357890904	4.3443	9.38E-06	0.003569845	68			
comp32439_c0_seq4.p1	-20.928435	27.232	1.04E-05	0.003885283	69			
comp32609_c0_seq10.p1	5.003133574	5.8098	1.09E-05	0.004031459	70			
comp36711_c0_seq1.p1	9.423473369	2.4755	1.15E-05	0.004178534	71			
comp32736_c0_seq17.p1	8.720537264	2.7298	1.17E-05	0.004195275	72			
comp32374_c8_seq2.p1	3.089622006	-8.449	1.25E-05	0.00442232	73	Uncharacterized acyltransferase C1718.04	Q9P7P0	<i>Schizosaccharomyces pombe</i> (strain 972 / ATCC 24843)
comp33068_c1_seq5.p1	5.494273876	5.1773	1.32E-05	0.00462933	74			
comp31266_c0_seq2.p3	13.30885469	1.9714	1.35E-05	0.004665712	75			
comp34620_c0_seq1.p1	9.149689757	2.5401	1.40E-05	0.004727197	76			
comp32858_c2_seq16.p1	9.307502828	2.4869	1.41E-05	0.004727197	77	S-type anion channel SLAH2	Q9ASQ7	<i>Arabidopsis thaliana</i>
comp27266_c0_seq1.p1	6.748934877	3.9005	1.69E-05	0.005065557	78	CBL-interacting serine/threonine-protein kinase 24	Q9LDD3	<i>Arabidopsis thaliana</i>
comp20142_c0_seq2.p1	12.4003803	1.9796	1.75E-05	0.005790344	79	6-phosphogluconate dehydrogenase, decarboxylating	P21577	<i>Synechococcus elongatus</i> (strain PCC 7942)
comp12356_c0_seq1.p1	8.780524095	2.471	1.94E-05	0.006283862	80			
comp32439_c0_seq22.p1	10.97405327	2.7076	2.32E-05	0.007408884	81			
comp33287_c0_seq9.p1	8.439939738	2.7288	2.95E-05	0.009329296	82			
comp32523_c0_seq13.p3	9.224342121	-2.405	3.23E-05	0.010090463	83			
comp23261_c1_seq1.p1	9.356088232	2.3524	3.59E-05	0.010853128	84			
comp24915_c0_seq2.p1	-20.928435	27.056	3.60E-05	0.010853128	85	DNA-binding protein SMUBP-2	P38935	<i>Homo sapiens</i>
comp33109_c0_seq7.p1	11.22900544	-1.989	3.61E-05	0.010853128	86			
comp36129_c0_seq1.p1	3.753056517	7.3096	4.00E-05	0.011901657	87	Niemann-Pick C1 protein	O35604	<i>Mus musculus</i>
comp32284_c0_seq33.p1	-2.456021205	-19.19	4.16E-05	0.012233704	88	Centrosomal protein of 76 kDa	A7E2J1	<i>Danio rerio</i>
comp28201_c0_seq1.p1	-20.928435	27.011	4.87E-05	0.014004234	89	DGAT2 DICD1 Diacylglycerol O-acyltransferase 2	Q54GCV	<i>Schizosaccharomyces pombe</i>
comp33139_c0_seq3.p1	-20.928435	27.011	4.87E-05	0.014004234	89.5			
comp27817_c0_seq2.p1	7.784478383	2.9928	5.04E-05	0.014342625	91	Ras-related protein Rab-8B	Q2HJ18	<i>Bos taurus</i>
comp1407_c0_seq1.p1	9.86096043	2.1665	5.34E-05	0.014903323	92	Superoxide dismutase [Fe]	O15905	<i>Babesia bovis</i>
comp11755_c0_seq1.p1	10.1648534	2.0996	5.41E-05	0.014903323	93	Ankyrin repeat, PH and SEC7 domain containing protein secG	Q54KA7	<i>Drosophila discoidium</i>
comp20554_c0_seq1.p1	11.48494805	-1.917	5.41E-05	0.014903323	94	Nephrin-3	Q7TNH6	<i>Mus musculus</i>
comp32374_c8_seq4.p1	3.988360376	6.7454	5.56E-05	0.015146978	95	Uncharacterized acyltransferase C1718.04	Q9P7P0	<i>Schizosaccharomyces pombe</i> (strain 972 / ATCC 24843)
comp31627_c1_seq4.p1	7.572090403	3.086	6.28E-05	0.016944222	96	Serine acetyltransferase	Q9ZK14	<i>Haemobacter pylori</i> (strain 199)
comp29898_c0_seq1.p1	11.14021571	-1.931	6.46E-05	0.017240233	97	Probable outer membrane protein pmg6	Q9Z899	<i>Chlamydia pneumoniae</i>
comp33287_c0_seq1.p1	8.200289554	2.7211	6.85E-05	0.018088545	98	Retrovirus-related Pol polyprotein from transposon TNT 1-94	P10978	<i>Nicotiana tabacum</i>
comp30996_c0_seq7.p1	-20.928435	26.95	7.01E-05	0.018319988	99	MOUSE Importin-7	Q9EPL8	<i>Mus musculus</i>
comp31004_c0_seq2.p1	5.38390919	4.9566	7.14E-05	0.018490689	100			
comp20707_c0_seq3.p1	9.174847808	2.3165	7.24E-05	0.018568726	101			
comp25093_c0_seq1.p1	10.87072523	1.9464	7.46E-05	0.018945067	102			
comp28107_c0_seq3.p1	11.51468942	1.8724	7.77E-05	0.019540396	103	Phenolphorbide a oxygenase, chloroplastic	Q9FYC2	<i>Arabidopsis thaliana</i>
comp13049_c0_seq1.p1	8.209655341	2.6919	8.17E-05	0.020251721	104	60S ribosomal protein L6	P34091	<i>Mesembryanthemum crystallinum</i>
comp27073_c0_seq1.p1	7.897984974	-2.85	8.21E-05	0.020251721	105			
comp33151_c0_seq10.p1	7.852844926	2.8777	8.37E-05	0.020448913	106	Vanadium-dependent bromoperoxidase	P81701	<i>Ascophyllum nodosum</i>
comp32647_c0_seq22.p1	11.52481838	1.8506	9.28E-05	0.022447103	107			
comp31602_c0_seq5.p1	8.950114771	-2.343	0.00010082	0.024168725	108	Abhydrolase domain-containing protein FAM108A	Q5XJ15	<i>Rattus norvegicus</i>
comp20385_c0_seq1.p1	11.01487269	-1.889	0.00010313	0.024467873	109	[Pyruvate dehydrogenase (lipoyl)] kinase, mitochondrial	P91622	<i>Drosophila melanogaster</i>
comp32927_c0_seq1.p1	7.839597212	2.8388	0.00010496	0.025556027	110			
comp32516_c0_seq1.p1	7.139010977	3.229	0.00014233	0.032641331	111	Probable outer membrane protein pmg6	Q9Z899	<i>Chlamydia pneumoniae</i>
comp33109_c0_seq1.p1*	15.30305253	-1.672	0.000155485	0.035942043	112	Poly(beta-D-mannuronate) C5 epimerase	Q88NC9	<i>Pseudomonas putida</i> (strain KT2440)
comp32948_c1_seq4.p1	14.02475974	1.6837	0.000158449	0.036303046	113			</

Table S8. GO enrichment analysis of DEGs on each timepoint.

	Category	GO.ID	Term	Annotated	Significant	Expected	p value
Up-regulated on the late timepoint							
10h AF vs 24h AF	MF	GO:0004144	diacylglycerol O-acyltransferase activity	10	1	0.01	0.0059
	CC	GO:0000793	condensed chromosome	5	1	0	0.0046
		GO:0005694	chromosome	104	1	0.1	0.0937
Down-regulated on the late timepoint							
3 h AF vs 10h AF	MF	GO:0005215	transporter activity	286	5	0.98	0.0024
10h AF vs 24h AF	BP	GO:0006508	proteolysis	46	2	0.1	0.0037
		GO:0008219	cell death	4	1	0.01	0.0089
	MF	GO:0008146	sulfotransferase activity	10	2	0.05	0.001
		GO:0004366	glycerol-3-phosphate O-acyltransferase activity	11	2	0.05	0.0012
		GO:0016782	transferase activity, transferring sulfur-containing groups	11	2	0.05	0.0012
CC	GO:0005576	extracellular region	82	3	0.27	0.0016	

p value, 0.01 was considered significant.



Code	Category	Item	Description
001	01	001	001
001	01	002	002
001	01	003	003
001	01	004	004
001	01	005	005
001	01	006	006
001	01	007	007
001	01	008	008
001	01	009	009
001	01	010	010
001	01	011	011
001	01	012	012
001	01	013	013
001	01	014	014
001	01	015	015
001	01	016	016
001	01	017	017
001	01	018	018
001	01	019	019
001	01	020	020
001	01	021	021
001	01	022	022
001	01	023	023
001	01	024	024
001	01	025	025
001	01	026	026
001	01	027	027
001	01	028	028
001	01	029	029
001	01	030	030
001	01	031	031
001	01	032	032
001	01	033	033
001	01	034	034
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001	01	041	041
001	01	042	042
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001	01	048	048
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001	01	063	063
001	01	064	064
001	01	065	065
001	01	066	066
001	01	067	067
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