Tocai_freeze_r1

Global Summary

%DE = 0.15

genes with fdr < 0.2 = 9 (6 + / 3 −)

genes with fdr < 0.1 = 4 (3 + / 1 −)

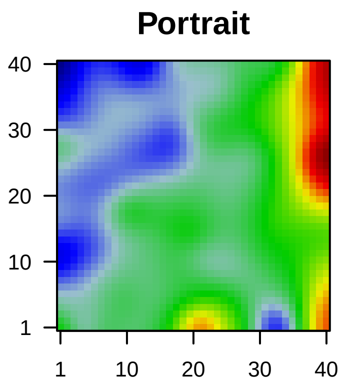
genes with fdr < 0.05 = 2 (1 + / 1 −)

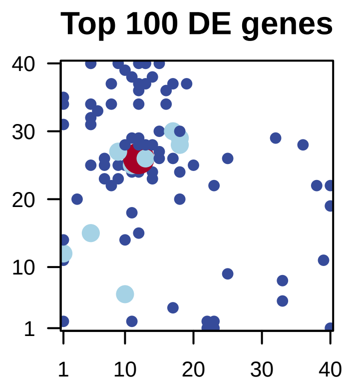
genes with fdr < 0.01 = 0 (0 + / 0 −)

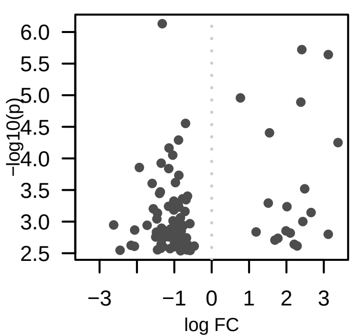
<FC> = 0

<p−value> = 0.33

<fdr> = 0.85

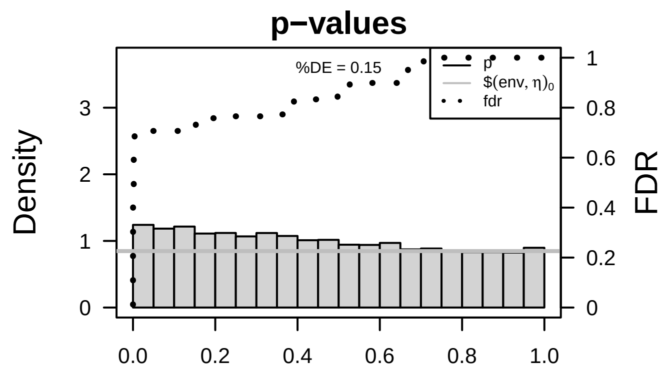






Differentially expressed genes

Rank	ID	log(FC)	p−value	fdr	Metagene	Description
Overexpressed						
1	Vitvi10g01879	2.41	2e−06	0.01	17 x 4	
2	Vitvi06g01454	3.12	2e−06	0.08	10 x 6	The component of a membrane consisting of the gene produc
3	Vitvi11g00155	0.77	1e−05	0.08	18 x 20	A membrane−bounded organelle of eukaryotic cells in which
4	Vitvi13g01673	2.39	1e−05	0.17	40 x 1	Catalysis of an oxidation−reduction (redox) reaction, a reversi
5	Vitvi07g01961	1.55	4e−05	0.17	12 x 15	The component of a membrane consisting of the gene produc
6	Vitvi05g00640	3.38	6e−05	0.19	11 x 2	The formation of a protein dimer, a macromolecular structure
7	Vitvi04g01935	2.49	3e−04	0.43	23 x 1	Catalysis of the hydrolysis of internal, alpha−peptide bonds in
8	Vitvi18g01232	1.51	5e−04	0.43	39 x 11	A cellular process that results in the biosynthesis of constitue
9	Vitvi11g00116	2.01	6e−04	0.43	22 x 2	
10	Vitvi01g00286	2.66	7e−04	0.43	40 x 22	The process in which a methyl group is covalently attached to
11	Vitvi05g00475	2.44	1e−03	0.43	10 x 6	
12	Vitvi12g02307	1.99	1e−03	0.43	11 x 18	The formation of a protein dimer, a macromolecular structure
13	Vitvi05g00242	1.19	1e−03	0.43	32 x 29	Binding to a metal ion.
14	Vitvi03g00217	2.1	2e−03	0.43	23 x 2	Catalysis of an oxidation−reduction (redox) reaction, a reversi
15	Vitvi18g00425	3.12	2e−03	0.43	1 x 2	That part of a multicellular organism outside the cells proper,
16	Vitvi12g01416	1.77	2e−03	0.43	36 x 28	
17	Vitvi13g00322	1.69	2e−03	0.62	40 x 19	The cell membranes and intracellular regions in a plant are co
18	Vitvi19g02100	2.21	2e−03	0.62	38 x 22	Binding to a metal ion.
19	Vitvi11g01415	2.29	2e−03	0.62	22 x 1	A membrane−bounded organelle of eukaryotic cells in which
20	Vitvi02g00723	0.65	3e−03	0.63	16 x 18	The component of a membrane consisting of the gene produc
Underexpressed						
1	Vitvi08g01542	−1.32	7e−07	0.01	11 x 25	Binding to a protein.
2	Vitvi13g01571	−0.7	3e−05	0.17	20 x 25	An thiol−dependent isopeptidase activity that cleaves ubiquiti
3	Vitvi07g00463	−0.89	5e−05	0.17	13 x 37	Binding to a protein.
4	Vitvi19g01899	−1.14	7e−05	0.29	15 x 30	Catalysis of an oxidation−reduction (redox) reaction, a reversi
5	Vitvi12g02534	−1.04	9e−05	0.29	5 x 25	The component of a membrane consisting of the gene produc
6	Vitvi04g00085	−1.35	1e−04	0.29	7 x 26	A membrane−bounded organelle of eukaryotic cells in which
7	Vitvi06g00368	−1.94	1e−04	0.29	18 x 30	A conserved series of molecular signals found in prokaryotes
8	Vitvi01g01664	−1.15	1e−04	0.43	5 x 32	
9	Vitvi13g01841	−0.88	2e−04	0.43	9 x 27	A membrane−bounded organelle of eukaryotic cells in which
10	Vitvi17g00864	−0.97	2e−04	0.43	12 x 24	A lipid bilayer along with all the proteins and protein complexe
11	Vitvi18g00231	−1.59	2e−04	0.43	5 x 15	Binding to ATP, adenosine 5'−triphosphate, a universally impo
12	Vitvi01g00354	−1.37	3e−04	0.43	9 x 23	A lipid bilayer along with all the proteins and protein complexe
13	Vitvi05g00326	−1.39	4e−04	0.43	10 x 39	Binding to a zinc ion (Zn).
14	Vitvi02g00201	−0.65	4e−04	0.43	23 x 22	The process in which one or more ubiquitin groups are added
15	Vitvi07g02415	−0.78	4e−04	0.43	18 x 24	A membrane−bounded organelle of eukaryotic cells in which
16	Vitvi14g01807	−0.69	5e−04	0.43	12 x 29	Catalysis of the hydrolysis of internal, alpha−peptide bonds in
17	Vitvi13g00069	−1.01	5e−04	0.43	14 x 28	A ubiquitin ligase complex that degrades mitotic cyclins and a
18	Vitvi03g00775	−0.89	6e−04	0.43	11 x 24	Binding to a zinc ion (Zn).
19	Vitvi10g00094	−1.15	6e−04	0.43	13 x 40	Catalysis of the transfer of a glycosyl group from one compou
20	Vitvi13g01398	−0.88	6e−04	0.43	11 x 25	Binding to a heme, a compound composed of iron complexed



Differentially expressed gene sets

Rank	GSZ	p−value	#all	Geneset
Overexpressed				
1	9.26	0	80	Cytoskeleton − Microtubules
2	7.4	0	206	Cell growth and death − Cell wall
3	7.13	0	217	Cell motility − Regulation of actin cytoskeleton
4	6.18	0	18	Photosynthesis − antenna proteins
5	6.18	0	219	Cell growth and death − Cell cycle
6	6.18	0	211	Ribosome
7	6.15	0	18	Energy metabolism − Photosynthesis antenna proteins
8	5.83	0	24	Replication protein − DNA Replication Factors
9	5.82	0	78	Energy metabolism − Photosynthesis
10	5.79	0	47	Transporter catalog − Electron carriers
11	5.69	0	26	Flavonoid biosynthesis
12	5.32	0	247	Translation − Ribosome
13	5.2	0	73	Transcription factors − AP2 EREBP
14	4.75	0	39	Pentose and glucuronate interconversions
15	4.51	0	144	Ribosome − Eukaryotes
16	4.48	0	67	Ribosome − Bacteria
17	4.36	0	40	Transport system − Thylakoid targeting pathway
18	4.2	0	36	DNA replication
19	4.19	0	38	Photosynthesis
20	4.04	0	153	Plant−pathogen interaction
Underexpressed				
1	−5.35	0e+00	116	Ribosome biogenesis − Pre−60S particles
2	−5.34	0e+00	62	Ribosome biogenesis − 90S particles
3	−4.43	0e+00	75	Translation − Ribosome biogenesis in Eukaryotes
4	−4.16	0e+00	151	RNA polymerase II system
5	−4	0e+00	64	Ribosome biogenesis in eukaryotes
6	−3.83	8e−05	11	Biosynthesis of secondary metabolism − ABA biosynthesis
7	−3.81	1e−04	165	Transcription − Spliceosome
8	−3.8	1e−04	51	Plant specific signaling − Circadian rhythm
9	−3.39	9e−04	146	Transporter catalog − Porter cat 7 to 17
10	−3.14	2e−03	27	Enzyme − 2.6 Transferring nitrogenous groups
11	−3.1	2e−03	32	Circadian rhythm − plant
12	−2.96	3e−03	36	Ribosome biogenesis − Pre−40S particles
13	−2.82	6e−03	99	mRNA surveillance pathway
14	−2.82	6e−03	27	Regulation of mitochondrial biogenesis
15	−2.81	6e−03	115	Enzyme − 3.6 Acting on acid anhydrides
16	−2.77	7e−03	67	Replication and repair − RNA degradation
17	−2.73	8e−03	139	Spliceosome
18	−2.73	8e−03	128	Ubiquitin system − Single Ring−finger type E3
19	−2.72	8e−03	85	Nucleocytoplasmic transport
20	−2.72	8e−03	26	Transcription factors − Alpha FAR−RED