

**Table S3** (A) functional categories overrepresented ( $P < 0.05$ ) present among the genes identified that are positively regulated by pp-1 (down in  $\Delta pp-1$ ) in at least one time point during the three to eight or the four to six hour time course. (B) functional categories overrepresented ( $P < 0.05$ ) present among the genes identified that are negatively regulated by pp-1 (up in  $\Delta pp-1$ ) in at least one time point during the three to eight or the four to six hour time course.

A.

Functional category	Abs Set	Rel Set	Genes Set	Abs Genome	Rel Genome	Rel Set/Rel Genome	P-Value
14.13.04 Lysosomal and vacuolar protein degradation	2	2.85	NCU01545 NCU04192	13	0.12	23.75	0.004
30.05.02.24 G-protein coupled receptor signalling pathway	2	2.85	NCU01545 NCU09427	17	0.16	17.812	0.006
30.05.02.24.04 Gamma-aminobutyric acid signalling pathway	1	1.42	NCU01545	1	0	0	0.007
30.05 transmembrane signal transduction	3	4.28	NCU01545 NCU09427 NCU04834	63	0.62	6.90	0.009
99 Unclassified proteins	50	71.4	NCU05178 NCU05395 NCU00746 NCU05593 NCU01697 NCU06373 NCU05856 NCU00354 NCU03708 NCU07817 NCU03344 NCU05814 NCU02176 NCU05495 NCU00881 NCU02298 NCU21668 NCU04122 NCU06115 NCU07802 NCU04278 NCU07439 NCU21253 NCU01189 NCU05408 NCU06919 NCU02465 NCU04542 NCU08257 NCU08037 NCU00995 NCU01191 NCU08833 NCU10052 NCU06514 NCU02488 NCU05502 NCU09562 NCU00265 NCU03960 NCU05831 NCU04429 NCU04732 NCU01380 NCU02432 NCU00811 NCU07091 NCU09693 NCU21678 NCU09802	5853	58.1	1.23	0.015
30.05.02 Non-enzymatic receptor mediated signalling	2	2.85	NCU09427 NCU01545	27	0.26	10.96153846	0.01495 7492
14.07.11.01 Autoproteolytic processing	1	1.42	NCU01545	7	0.06	23.66666667	0.04768 8778
14.13.04.02 Vacuolar protein degradation	1	1.42	NCU04192	7	0.06	23.66666667	0.04768 8778
16.01.01 Receptor binding	1	1.42	NCU01545	7	0.06	23.66666667	0.04768 8778

B.

Functional category	Abs Set	Rel Set	Genes Set	Abs Genome	Rel Genome	Rel Set/Rel Genome	P-Value
11 Transcription	8	20.5	NCU04611 NCU02729 NCU03794 NCU05194 NCU07528 NCU01772 NCU03669 NCU01183	725	7.2	2.85	0.006
11.06 rna modification	2	5.12	NCU03669 NCU07528	42	0.41	12.49	0.011
01.06.06.13 Tetraterpenes (carotenoids) metabolism	1	2.56	NCU07719	3	0.02	128.00	0.012
11.02 RNA synthesis	6	15.3	NCU01772 NCU02729 NCU04611 NCU01183 NCU03669 NCU05194	533	5.29	2.89	0.016
01.01.09.05.01 Biosynthesis of tyrosine	1	2.56	NCU06360	5	0.04	64.00	0.019
32.07.07.07 Superoxide metabolism	1	2.56	NCU09560	5	0.04	64.00	0.019
11.02.03 mRNA Synthesis	5	12.8	NCU05194 NCU01772 NCU04611 NCU02729 NCU03669	465	4.61	2.78	0.032
01.01.09.01.02 Degradation of glycine	1	2.56	NCU02727	10	0.09	28.44	0.038
01.05.05.07 C-1 compound catabolism	1	2.56	NCU02727	10	0.09	28.44	0.038
11.06.01 rRNA modification	1	2.56	NCU03669	10	0.09	28.44	0.038
11.02.03.01 General transcription activities	2	5.12	NCU04611 NCU01772	84	0.83	6.17	0.042
11.02.03.04 Transcriptional control	4	10.2	NCU02729 NCU05194 NCU04611 NCU03669	350	3.47	2.94	0.045
01.05.05 C-1 compound metabolism	1	2.56	NCU02727	12	0.11	23.27	0.046
34.11.11 Rhythm (e.g. circadian, ultradian)	1	2.56	NCU02500	12	0.11	23.27	0.046
01.01.09.01.01 Biosynthesis of glycine	1	2.56	NCU02727	13	0.12	21.33	0.049
10.01.03.03 ORI recognition and priming complex formation	1	2.56	NCU05194	13	0.12	21.33	0.049
40.01.05 Growth regulators / regulation of cell size	1	2.56	NCU02729	13	0.12	21.33	0.049