

The following are given as supplementary data to the paper ‘Genome-scale analysis of *Pasteurella multocida* gene expression during growth within the natural chicken host’ by J. D. Boyce, I. Wilkie, M. Harper, M. L. Paustian, V. Kapur and B. Adler.

Supplementary Data Table 1. Expression values of *P. multocida* genes significantly up-regulated in any of the three chicken infections

Gene ID	COGs functional category *	Expression values [†]		
		c1	c2	c3
<i>acnB</i>	Energy production and conversion genes	0.13 ± 0.23	0.41 ± 0.16	0.93 ± 0.24
<i>afuC</i>	Inorganic ion transport and metabolism genes	0.05 ± 0.31	0.78 ± 0.15	ND [‡]
<i>araD</i>	Carbohydrate transport and metabolism genes	-0.01 ± 0.88	-0.08 ± 0.5	0.88 ± 0.6
<i>arcB</i>	Signal transduction mechanisms genes	-0.07 ± 0.2	0.72 ± 0.57	1.05 ± 0.64
<i>aroA</i>	Amino acid transport and metabolism genes	0.03 ± 0.37	0.84 ± 0.11	1.15 ± 0.42
<i>asd</i>	Amino acid transport and metabolism genes	0.13 ± 0.54	0.66 ± 0.17	1.63 ± 0.7
<i>asnA</i>	Amino acid transport and metabolism genes	3.22 ± 0.77	1.24 ± 0.3	2.71 ± 0.37
<i>asnC</i>	Transcription genes	0.28 ± 0.24	0.08 ± 0.33	1.21 ± 0.3
<i>aspC</i>	Amino acid transport and metabolism genes	1.09 ± 0.37	1.17 ± 0.3	1.51 ± 0.32
<i>azlD</i>	Amino acid transport and metabolism genes	0.94 ± ND	-1.06 ± ND	-0.45 ± 1.74
<i>bioD1</i>	Coenzyme metabolism genes	1.03 ± 0.17	-1.99 ± 0.1	-2.27 ± 0.56
<i>bioD2</i>	Coenzyme metabolism genes	0.48 ± 0.57	0.33 ± 0.14	0.87 ± 0.39
<i>carA</i>	Amino acid transport and metabolism genes	0.07 ± 0.2	2.18 ± 0.26	1.56 ± 0.14
<i>carB</i>	Amino acid transport and metabolism genes	0.34 ± 0.32	1.56 ± 0.54	1.1 ± 0.37
<i>ccmC</i>	Posttranslational modification, protein turnover, chaperones genes	0.88 ± 0.22	0.61 ± 0.25	0.24 ± 0.18
<i>ccmF</i>	Posttranslational modification, protein turnover, chaperones genes	0.77 ± 0.53	0.88 ± 0.41	0.58 ± 0.53
<i>cdd</i>	Nucleotide transport and metabolism genes	1.45 ± 0.26	-0.45 ± 0.13	-0.26 ± 0.33
<i>clpB</i>	Posttranslational modification, protein turnover, chaperones genes	1.34 ± 0.15	1.57 ± 0.25	0.81 ± 0.14
<i>codB</i>	Nucleotide transport and metabolism genes	0.15 ± 0.2	1.02 ± 0.2	0.76 ± 0.26
<i>corE</i>	Posttranslational modification, protein turnover, chaperones genes	0.7 ± 0.16	0.54 ± 0.25	1.34 ± 0.21
<i>crp</i>	Signal transduction mechanisms genes	0.47 ± 0.3	0.52 ± 0.09	1 ± 0.52
<i>cydD</i>	Secondary metabolites biosynthesis, transport and catabolism genes	-0.01 ± 0.23	0.64 ± 0.16	1.58 ± 0.75
<i>dcaA</i>	General function prediction only genes	1.27 ± 1.34	2.18 ± 0.43	2.86 ± 0.9
<i>dcuB</i>	General function prediction only genes	1.17 ± 0.35	-0.07 ± 0.1	0.14 ± 0.62
<i>dnaJ</i>	Posttranslational modification, protein turnover, chaperones genes	0.93 ± 0.52	1.05 ± 0.38	0.12 ± 0.47
<i>dnaK</i>	Posttranslational modification, protein turnover, chaperones genes	0.84 ± 0.25	1.11 ± 0.21	0.47 ± 0.59
<i>dnt</i>	DNA replication, recombination and repair genes	0.3 ± 0.2	-0.06 ± 0.24	0.86 ± 0.14
<i>dppA</i>	Amino acid transport and metabolism genes	0.88 ± 0.57	1.95 ± 0.45	3.5 ± 0.33
<i>dppB</i>	Amino acid transport and metabolism genes	-0.08 ± 0.2	0.54 ± 0.2	1.35 ± 0.17
<i>dppC</i>	Amino acid transport and metabolism genes	0.27 ± 0.19	0.18 ± 0.08	1.48 ± 0.3
<i>dppD</i>	Amino acid transport and metabolism genes	0.58 ± 0.27	0.92 ± 0.12	1.51 ± 0.22
<i>dppF</i>	Amino acid transport and metabolism genes	-0.06 ± 0.14	0.42 ± 0.28	0.87 ± 0.21
<i>dsbB</i>	Posttranslational modification, protein turnover, chaperones genes	0.55 ± 0.1	0.4 ± 0.17	1.14 ± 0.38
<i>eda</i>	Carbohydrate transport and metabolism genes	0.74 ± 0.45	1.26 ± 0.14	ND
<i>fecB</i>	Inorganic ion transport and metabolism genes	-0.13 ± 0.17	0.1 ± 0.21	1.51 ± 0.34
<i>fnr</i>	Signal transduction mechanisms genes	-0.99 ± 0.25	1.45 ± 0.15	1.21 ± 0.59
<i>folB</i>	Coenzyme metabolism genes	0.45 ± 0.42	0.82 ± 0.59	0.8 ± 0.26

<i>folD</i>	Coenzyme metabolism genes	-0.15 ± 0.94	1.28 ± 0.18	1.67 ± 0.44
<i>fruA</i>	Carbohydrate transport and metabolism genes	0.54 ± 0.4	0.5 ± 0.14	0.89 ± 0.31
<i>fruK</i>	Carbohydrate transport and metabolism genes	0.32 ± 0.73	0.58 ± 0.29	0.9 ± 0.35
<i>fumC</i>	Energy production and conversion genes	1.11 ± 0.14	-0.63 ± 0.11	-0.84 ± 0.23
<i>galM</i>	Carbohydrate transport and metabolism genes	0.19 ± 0.53	-0.65 ± 1.47	0.94 ± 0.68
<i>galR</i>	Transcription genes	0.32 ± 0.24	0.77 ± 0.1	0.67 ± 0.09
<i>gcvA</i>	Transcription genes	0.73 ± 0.6	1.29 ± 0.35	1.59 ± 0.23
<i>gdhA</i>	Amino acid transport and metabolism genes	3.01 ± 0.27	1.51 ± 0.39	3.27 ± 0.91
<i>glgB</i>	Carbohydrate transport and metabolism genes	0.29 ± 0.53	0.98 ± 0.46	0.69 ± 0.65
<i>glgx</i>	Carbohydrate transport and metabolism genes	0.12 ± 0.32	1.04 ± 0.22	1.13 ± 0.43
<i>glnA</i>	Amino acid transport and metabolism genes	0.65 ± 0.15	0.51 ± 0.05	0.95 ± 0.24
<i>glnS</i>	Translation, ribosomal structure and biogenesis genes	0.7 ± 0.17	-0.04 ± 0.24	0.93 ± 0.33
<i>glpX</i>	Carbohydrate transport and metabolism genes	0.04 ± 0.43	2.5 ± 0.58	2.78 ± 0.26
<i>gltA</i>	Energy production and conversion genes	1.04 ± 0.39	1.35 ± 0.43	2.05 ± 0.45
<i>glyA</i>	Amino acid transport and metabolism genes	0.28 ± 0.14	1.62 ± 0.09	2.35 ± 0.5
<i>gntP</i>	Carbohydrate transport and metabolism genes	-0.03 ± 1.01	0.44 ± 0.24	1.07 ± 0.36
<i>groES</i>	Posttranslational modification, protein turnover, chaperones genes	0.95 ± 0.57	0.78 ± 0.43	0.03 ± 0.25
<i>hasR</i>	Inorganic ion transport and metabolism genes	1.68 ± 0.71	1.26 ± 0.49	0.08 ± 0.61
<i>hisA</i>	Amino acid transport and metabolism genes	1.03 ± 0.4	0.47 ± 0.23	0.93 ± 0.49
<i>hofB</i>	Cell motility and secretion genes	0.36 ± 0.53	0.63 ± ND	0.85 ± 0.58
<i>hpaH</i>	Secondary metabolites biosynthesis, transport and catabolism genes	0.49 ± 0.38	0.34 ± 0.46	0.98 ± 0.46
<i>hslV</i>	Posttranslational modification, protein turnover, chaperones genes	0.29 ± 0.21	1.33 ± 0.68	-0.33 ± 0.31
<i>htpG</i>	Posttranslational modification, protein turnover, chaperones genes	1.08 ± 0.13	1.45 ± 0.25	0.39 ± 0.1
<i>hugZ_1</i>	Inorganic ion transport and metabolism genes	-0.31 ± 0.23	0.95 ± 0.22	3.20 ± 0.51
<i>hugZ_2</i>	Inorganic ion transport and metabolism genes	-0.19 ± 0.25	0.98 ± 0.13	1.03 ± 0.17
<i>ibeB</i>	Cell envelope biogenesis, outer membrane genes	0.15 ± 0.44	1.07 ± 0.28	0.61 ± 0.38
<i>idp</i>	Energy production and conversion genes	0.27 ± 0.26	0.75 ± 0.09	1.83 ± 0.27
<i>ilvC</i>	Amino acid transport and metabolism genes	0.05 ± 0.21	0.18 ± 0.32	1.13 ± 0.19
<i>ilvG</i>	Amino acid transport and metabolism genes	-0.25 ± 0.39	0.5 ± 0.34	1.44 ± 0.19
<i>ilvH</i>	Amino acid transport and metabolism genes	1.21 ± 0.99	1.82 ± 0.41	1.33 ± 0.23
<i>ilvM</i>	Amino acid transport and metabolism genes	0.14 ± 0.21	0.8 ± 0.09	1.71 ± 0.18
<i>lldD</i>	Energy production and conversion genes	-0.37 ± 0.3	2.22 ± 0.24	2.08 ± 1
<i>lppC</i>	General function prediction only genes	0.71 ± 0.37	0.89 ± 0.14	1.03 ± 0.46
<i>lyx</i>	Carbohydrate transport and metabolism genes	0.4 ± 0.18	0.42 ± 0.04	1.04 ± 0.09
<i>malQ</i>	Carbohydrate transport and metabolism genes	0.93 ± 0.29	0.88 ± 0.32	0.18 ± 0.35
<i>mdh_1</i>	Energy production and conversion genes	0.41 ± 0.24	0.61 ± 0.33	1.07 ± 0.38
<i>metB</i>	Amino acid transport and metabolism genes	0.11 ± 0.07	1.57 ± 0.19	ND
<i>metC_1</i>	Amino acid transport and metabolism genes	0.74 ± 0.33	0.85 ± 0.12	0.24 ± 0.26
<i>metE</i>	Amino acid transport and metabolism genes	0.31 ± 0.28	1.17 ± 0.43	1.55 ± 0.57
<i>metF</i>	Amino acid transport and metabolism genes	0.73 ± 2.15	2.18 ± 1.04	1.04 ± 0.74
<i>mtlD</i>	Carbohydrate transport and metabolism genes	0.49 ± ND	0.03 ± 0.06	1.09 ± 0.25
<i>mtr</i>	Amino acid transport and metabolism genes	1.51 ± 0.61	0.38 ± 0.55	0.24 ± 0.28
<i>nagB</i>	Carbohydrate transport and metabolism genes	0.2 ± 0.3	0.8 ± 0.11	0.79 ± 0.25
<i>napA</i>	Energy production and conversion genes	2.33 ± 0.26	2.13 ± 0.51	1.69 ± 0.14
<i>napB</i>	Energy production and conversion genes	0.81 ± 0.28	1.63 ± 0.42	1.44 ± 0.25
<i>napC</i>	Energy production and conversion genes	1.97 ± 0.53	2.28 ± 0.81	1.08 ± 0.85
<i>napD</i>	Inorganic ion transport and metabolism genes	1.09 ± 0.51	0.42 ± 0.11	0.24 ± 0.16
<i>napF</i>	Energy production and conversion genes	3.7 ± 0.17	2.58 ± 0.17	2.29 ± 0.43
<i>nrdB</i>	Nucleotide transport and metabolism genes	0.6 ± 0.19	0.46 ± 0.06	0.85 ± 0.24
<i>nrdD</i>	Nucleotide transport and metabolism genes	2.81 ± 0.27	-0.01 ± 0.15	ND
<i>nrdG</i>	Posttranslational modification, protein turnover, chaperones genes	3.15 ± 1.46	0.45 ± ND	ND

<i>nrfA</i>	Inorganic ion transport and metabolism genes	1.68 ± 0.61	0.12 ± 0.15	-0.62 ± 0.27
<i>nrfB</i>	Inorganic ion transport and metabolism genes	1.29 ± 0.09	0.38 ± 0.16	-0.25 ± 0.12
<i>nrfC</i>	Energy production and conversion genes	0.99 ± 0.07	0.41 ± 0.41	-1.38 ± 0.25
<i>nrfE</i>	Posttranslational modification, protein turnover, chaperones genes	-0.71 ± 0.18	0.45 ± 0.07	1.13 ± 0.18
<i>oapA</i>	Cell envelope biogenesis, outer membrane genes	-0.01 ± 0.15	-0.06 ± 0.22	0.85 ± 0.19
<i>oppB</i>	Amino acid transport and metabolism genes	0.2 ± 0.21	0.76 ± 0.37	1.07 ± 0.41
<i>oppD</i>	Amino acid transport and metabolism genes	0.15 ± 0.21	0.64 ± 0.13	1.02 ± 0.11
<i>oxyR</i>	Transcription genes	0.47 ± 0.19	0.35 ± 0.11	0.91 ± 0.31
<i>pepA</i>	Amino acid transport and metabolism genes	-0.22 ± 0.21	0.48 ± 0.1	0.96 ± 0.15
<i>pepP</i>	Amino acid transport and metabolism genes	0.5 ± 0.45	0.36 ± 0.25	1.2 ± 0.27
<i>pfhB2</i>	Cell envelope biogenesis, outer membrane genes	1.01 ± 0.3	0.13 ± 0.86	-0.24 ± 0.64
<i>pfhR</i>	Inorganic ion transport and metabolism genes	-0.68 ± 0.19	0.21 ± 0.08	1.14 ± 0.89
<i>pgk</i>	Carbohydrate transport and metabolism genes	0.92 ± 0.17	-0.12 ± 0.08	-0.58 ± 0.18
<i>pheA</i>	Amino acid transport and metabolism genes	0.14 ± 0.29	0.19 ± 0.19	0.9 ± 0.48
PM0066	Function unknown genes	0.37 ± 0.57	0.87 ± 0.03	1.34 ± 0.5
PM0092	Translation, ribosomal structure and biogenesis genes	1.4 ± 0.41	0.83 ± 0.1	1.63 ± 0.14
PM0110	Not in COGs	0.01 ± 1.51	-0.01 ± 0.21	0.95 ± 0.88
PM0111	Not in COGs	1.1 ± 1.74	-0.49 ± 0.34	-0.75 ± 1.44
PM0169	General function prediction only genes	0.9 ± 0.6	0.88 ± 0.25	0.44 ± 0.68
PM0210	Function unknown genes	1.07 ± 0.12	-0.33 ± 0.14	-0.3 ± 0.2
PM0234	Not in COGs	1.02 ± 0.35	0.06 ± 0.44	0.24 ± 0.23
PM0253	Not in COGs	0.32 ± 0.07	0.94 ± 0.26	0.48 ± 0.35
PM0287	General function prediction only genes	0.99 ± 0.32	3.07 ± 0.17	2.1 ± 0.3
PM0297	Not in COGs	-0.13 ± 0.24	0.27 ± 0.04	0.88 ± 0.27
PM0298	Inorganic ion transport and metabolism genes	-0.3 ± 0.18	0.6 ± 0.1	0.96 ± 0.51
PM0300	Inorganic ion transport and metabolism genes	-0.22 ± 0.09	0.68 ± 0.51	1.14 ± 0.15
PM0309	Not in COGs	1.81 ± ND	ND	-1.91 ± 1.91
PM0314	Not in COGs	0.44 ± 0.13	0.91 ± 0.22	1.27 ± 0.18
PM0336	Inorganic ion transport and metabolism genes	0.36 ± 0.78	1.09 ± 0.77	2.2 ± 1.06
PM0366	Translation, ribosomal structure and biogenesis genes	0.23 ± 0.5	0.72 ± 0.55	1.73 ± 1.28
PM0424	Not in COGs	-0.9 ± 2.29	-0.04 ± 0.74	0.91 ± 0.26
PM0452	Inorganic ion transport and metabolism genes	-0.21 ± 0.35	1.04 ± 0.3	1.67 ± 0.59
PM0453	Inorganic ion transport and metabolism genes	0.02 ± 0.15	1.16 ± 0.16	1.47 ± 0.15
PM0466	DNA replication, recombination and repair genes	-0.08 ± 0.43	0.25 ± 0.11	0.95 ± ND
PM0476	Function unknown genes	-0.21 ± 0.18	0.23 ± 0.13	1.14 ± 0.22
PM0504	Not in COGs	0.18 ± 0.24	0.17 ± 0.41	0.9 ± 0.15
PM0565	Nucleotide transport and metabolism genes	0.85 ± 1.34	2.23 ± 1.37	1.42 ± 0.48
PM0568	General function prediction only genes	0.1 ± 0.4	1 ± 0.52	0.78 ± 0.61
PM0587	Function unknown genes	0.92 ± 0.2	-0.29 ± 0.12	-0.27 ± 0.41
PM0590	Not in COGs	0.23 ± 0.71	0.9 ± 0.65	1.49 ± 0.64
PM0595	Function unknown genes	0.95 ± 1.27	-0.35 ± 0.09	-2.2 ± ND
PM0596	General function prediction only genes	-0.21 ± 0.24	0.06 ± 0.29	0.9 ± 0.42
PM0598	Inorganic ion transport and metabolism genes	-0.11 ± 0.07	0.54 ± 0.74	0.9 ± 0.28
PM0601	Carbohydrate transport and metabolism genes	0.9 ± 1.18	0.76 ± 0.72	1.36 ± 1.05
PM0613	Not in COGs	-0.04 ± 0.23	0.57 ± 0.16	1.53 ± 0.59
PM0630	Not in COGs	0.89 ± 0.11	-0.03 ± 0.37	0.35 ± 0.3
PM0638	General function prediction only genes	0.44 ± 0.25	0.51 ± 0.16	0.86 ± 0.22
PM0649	General function prediction only genes	0.24 ± 0.57	0.57 ± 0.08	1.08 ± 0.81
PM0669	Signal transduction mechanisms genes	0.25 ± 0.18	0.62 ± 0.31	0.84 ± 0.1
PM0697	Not in COGs	1 ± ND	ND	-1.63 ± ND
PM0711	Carbohydrate transport and metabolism genes	0.15 ± 0.24	0.27 ± 0.33	1.38 ± 0.22
PM0718	General function prediction only genes	0.27 ± 0.11	1.15 ± 0.1	0.85 ± 0.47
PM0733	Energy production and conversion genes	0.15 ± 0.31	0.36 ± 0.13	1.14 ± 0.14

<i>PM0741</i>	Inorganic ion transport and metabolism genes	0.08 ± 0.15	1.02 ± 0.41	1.2 ± 0.16
<i>PM0750</i>	Transcription genes	0.24 ± 0.5	0.19 ± 0.39	1.06 ± 0.53
<i>PM0763</i>	General function prediction only genes	1.03 ± 0.14	1.23 ± 0.06	0.67 ± 0.08
<i>PM0799</i>	Function unknown genes	1.39 ± ND	ND	0.11 ± 1.51
<i>PM0803</i>	Not in COGs	-0.61 ± 0.2	0.7 ± 0.65	1.86 ± 0.35
<i>PM0817</i>	DNA replication, recombination and repair genes	0.7 ± 0.28	0.51 ± 0.25	1.12 ± 0.33
<i>PM0835</i>	Carbohydrate transport and metabolism genes	-0.17 ± 0.14	1.41 ± 0.06	0.36 ± 0.12
<i>PM0910</i>	General function prediction only genes	0.22 ± 0.16	0.3 ± 0.15	0.97 ± 0.12
<i>PM0937</i>	Amino acid transport and metabolism genes	0.95 ± 0.16	1.2 ± 0.13	0.09 ± ND
<i>PM0948</i>	Inorganic ion transport and metabolism genes	1.1 ± 0.13	0.95 ± 0.32	ND
<i>PM0962</i>	Not in COGs	1.54 ± 1.71	0.41 ± 0.67	ND
<i>PM0999</i>	Coenzyme metabolism genes	0.48 ± 0.57	1.69 ± 0.02	ND
<i>PM1072</i>	Lipid metabolism genes	-0.11 ± 0.09	-0.13 ± 0.15	0.97 ± 0.09
<i>PM1077</i>	Not in COGs	0.14 ± 0.18	-0.03 ± 0.04	1.41 ± ND
<i>PM1130</i>	Inorganic ion transport and metabolism genes	0.55 ± 0.67	0.8 ± 0.32	1.23 ± 0.53
<i>PM1138</i>	Cell envelope biogenesis, outer membrane genes	0.63 ± 0.27	0.78 ± 0.63	0.69 ± 0.29
<i>PM1158</i>	Secondary metabolites biosynthesis, transport and catabolism genes	0.76 ± 0.05	0.65 ± 0.07	1.69 ± 0.26
<i>PM1171</i>	Function unknown genes	-0.49 ± 0.19	0.04 ± 0.09	1.03 ± 0.28
<i>PM1172</i>	Function unknown genes	0.38 ± 1.88	0.9 ± 0.75	-1.01 ± 0.76
<i>PM1176</i>	Not in COGs	0.16 ± 0.13	0.25 ± 0.09	1.13 ± 0.21
<i>PM1245</i>	Carbohydrate transport and metabolism genes	0.13 ± 0.21	0.34 ± 0.06	0.95 ± 0.31
<i>PM1246</i>	Carbohydrate transport and metabolism genes	0.12 ± 0.3	0.43 ± 0.09	0.88 ± 0.3
<i>PM1253</i>	Function unknown genes	0.48 ± 0.08	0.52 ± 0.14	1.07 ± 0.16
<i>PM1255</i>	Function unknown genes	0.95 ± 1.08	0.49 ± 0.27	0.71 ± 1.01
<i>PM1267</i>	Function unknown genes	0.74 ± 0.17	0.83 ± 0.13	0.1 ± 0.33
<i>PM1299</i>	Energy production and conversion genes	1.34 ± 0.23	-0.42 ± 0.2	-0.96 ± 0.46
<i>PM1312</i>	Transcription genes	0.37 ± 0.7	1.32 ± ND	0.16 ± ND
<i>PM1323</i>	Not in COGs	0.14 ± 0.37	0.86 ± 0.47	1.67 ± 0.36
<i>PM1347</i>	Posttranslational modification, protein turnover, chaperones genes	-0.04 ± 0.09	0.48 ± 0.1	0.95 ± 0.08
<i>PM1360</i>	Cell envelope biogenesis, outer membrane genes	0.24 ± 1.32	0.31 ± 0.4	1.2 ± 0.85
<i>PM1372</i>	Carbohydrate transport and metabolism genes	-0.01 ± 0.21	-0.02 ± 0.16	0.85 ± 0.07
<i>PM1374</i>	Function unknown genes	0.2 ± 0.19	0.56 ± 0.1	1.65 ± 0.21
<i>PM1375</i>	Transcription genes	0.24 ± 0.22	0.33 ± 0.27	0.96 ± 0.38
<i>PM1376</i>	Signal transduction mechanisms genes	0.29 ± 0.1	0.41 ± 0.17	1.08 ± 0.2
<i>PM1378</i>	Carbohydrate transport and metabolism genes	0.48 ± 0.07	0.72 ± 0.05	2.03 ± 0.38
<i>PM1423</i>	Energy production and conversion genes	-0.06 ± 0.48	0.92 ± 0.42	0.72 ± 0.43
<i>PM1460</i>	Signal transduction mechanisms genes	1.26 ± 1.15	1.23 ± 0.4	1.29 ± 0.61
<i>PM1470</i>	General function prediction only genes	-0.06 ± 0.11	0.43 ± 0.07	1.21 ± 0.56
<i>PM1477</i>	General function prediction only genes	-0.51 ± 0.16	0.76 ± 0.1	1.05 ± 0.16
<i>PM1479</i>	General function prediction only genes	-0.28 ± 0.33	0.75 ± 0.08	1.06 ± 0.29
<i>PM1480</i>	Inorganic ion transport and metabolism genes	0.25 ± 0.43	0.49 ± 0.21	1.37 ± 0.24
<i>PM1500</i>	Function unknown genes	0.28 ± 0.09	0.29 ± 0.44	0.87 ± 0.2
<i>PM1503</i>	General function prediction only genes	0.08 ± 0.55	2.63 ± 0.58	1.5 ± 0.72
<i>PM1504</i>	General function prediction only genes	0.13 ± 0.21	1.9 ± 0.27	1.62 ± 0.5
<i>PM1511</i>	General function prediction only genes	0.29 ± 0.61	0.1 ± 0.55	0.97 ± 0.58
<i>PM1515</i>	Cell envelope biogenesis, outer membrane genes	0.88 ± 0.3	0.48 ± 0.07	0.24 ± 0.25
<i>PM1516</i>	DNA replication, recombination and repair genes	0.87 ± 0.18	0.45 ± 0.11	0.52 ± 0.22
<i>PM1540</i>	Not in COGs	1.08 ± 1.27	-0.09 ± 0.07	-1.85 ± 2.12
<i>PM1577</i>	Transcription genes	0.49 ± 0.52	0.83 ± 0.31	0.91 ± 0.11
<i>PM1578</i>	General function prediction only genes	-0.05 ± 0.36	0.74 ± 0.47	1.94 ± 0.4
<i>PM1580</i>	Function unknown genes	0.08 ± 0.42	1.23 ± 0.12	2.04 ± 0.29
<i>PM1604</i>	DNA replication, recombination and repair genes	0.24 ± 0.54	-0.09 ± 0.37	1.1 ± 1.22
<i>PM1626</i>	Cell envelope biogenesis, outer membrane genes	0.63 ± 0.83	0.52 ± 0.16	1.09 ± 0.32
<i>PM1637</i>	Function unknown genes	0.33 ± 1.06	0.23 ± 0.45	1.05 ± 0.14

<i>PM1641</i>	General function prediction only genes	0.55 ± 0.78	0.45 ± 0.08	1.31 ± 0.17
<i>PM1644</i>	Carbohydrate transport and metabolism genes	0.66 ± 0.88	0.58 ± 0.5	1.34 ± 0.81
<i>PM1649</i>	Carbohydrate transport and metabolism genes	0.25 ± 1.79	0.13 ± 0.41	1.37 ± 0.45
<i>PM1672</i>	General function prediction only genes	0.22 ± 0.1	0.13 ± 0.06	0.88 ± 0.13
<i>PM1677</i>	Cell motility and secretion genes	0.38 ± 0.09	0.11 ± 0.18	0.84 ± 0.28
<i>PM1679</i>	Not in COGs	0.45 ± 0.41	0.17 ± 0.38	0.98 ± 0.38
<i>PM1699</i>	Not in COGs	0.76 ± 0.59	0.6 ± 0.05	1.22 ± 0.43
<i>PM1727</i>	Amino acid transport and metabolism genes	2.29 ± ND	0.21 ± ND	-0.46 ± ND
<i>PM1735</i>	DNA replication, recombination and repair genes	1.68 ± 2.35	-0.01 ± ND	-0.93 ± 0.62
<i>PM1759</i>	General function prediction only genes	1.24 ± 0.38	-0.21 ± 0.3	-0.92 ± 1.65
<i>PM1805</i>	Not in COGs	0.51 ± 0.24	0.58 ± 0.18	0.89 ± 0.19
<i>PM1826</i>	Not in COGs	-0.26 ± 0.67	0.35 ± 0.72	0.89 ± 0.64
<i>PM1839</i>	Secondary metabolites biosynthesis, transport and catabolism genes	-0.21 ± 0.14	1.18 ± 0.1	ND
<i>PM1845</i>	Function unknown genes	1.76 ± 1.48	-0.08 ± 0.48	1 ± 0.53
<i>PM1868</i>	Function unknown genes	0.55 ± 0.06	0.78 ± 0.25	1.2 ± 0.08
<i>PM1869</i>	Transcription genes	0.21 ± 0.27	0.92 ± 0.19	0.46 ± 0.17
<i>PM1882</i>	Nucleotide transport and metabolism genes	-0.27 ± 0.6	2.3 ± ND	-1.52 ± ND
<i>PM1895</i>	Function unknown genes	1.18 ± 0.35	0.25 ± 0.31	0.52 ± 0.35
<i>PM1905</i>	Inorganic ion transport and metabolism genes	0.28 ± 0.19	0.58 ± 0.09	0.98 ± 0.38
<i>PM1944</i>	Inorganic ion transport and metabolism genes	0.49 ± 0.23	0.99 ± 0.11	1.18 ± 0.18
<i>PM1968</i>	Secondary metabolites biosynthesis, transport and catabolism genes	-2.83 ± 0.11	1.07 ± 0.64	-0.16 ± 0.52
<i>PM1969</i>	Carbohydrate transport and metabolism genes	1.65 ± ND	-0.59 ± 0.71	-0.27 ± 0.86
<i>PM1981</i>	General function prediction only genes	0.07 ± 0.72	1.69 ± 0.83	0.87 ± 1.04
<i>PM1983</i>	Secondary metabolites biosynthesis, transport and catabolism genes	0.76 ± 0.22	1.42 ± 0.26	1.27 ± 0.34
<i>ppc</i>	Energy production and conversion genes	3.07 ± 0.59	1.39 ± 0.49	3.04 ± 0.61
<i>pqiB</i>	Function unknown genes	0.63 ± 0.46	0.77 ± 0.26	0.4 ± 0.11
<i>pqqL</i>	General function prediction only genes	-0.24 ± 0.24	0.73 ± 0.29	2 ± 0.06
<i>prlC</i>	Amino acid transport and metabolism genes	0.92 ± 0.22	0.89 ± 0.38	0.27 ± 0.31
<i>ptfA</i>	Cell motility and secretion genes	0.89 ± 0.79	0.83 ± 0.45	0.9 ± 0.44
<i>ptsG</i>	Carbohydrate transport and metabolism genes	0.91 ± 0.43	0.41 ± 0.16	0.89 ± 0.24
<i>purD</i>	Nucleotide transport and metabolism genes	0.75 ± 0.41	1.82 ± 0.24	2.92 ± 0.15
<i>purF</i>	Nucleotide transport and metabolism genes	0.33 ± 0.91	1.92 ± 0.24	1.5 ± 0.31
<i>purH</i>	Nucleotide transport and metabolism genes	1.26 ± 0.12	0.87 ± 0.16	1.21 ± 0.25
<i>purK</i>	Nucleotide transport and metabolism genes	-0.03 ± 1.78	1.42 ± 1.04	2.25 ± 0.58
<i>purL</i>	Nucleotide transport and metabolism genes	0.02 ± 0.23	1.47 ± 0.18	1.38 ± 0.26
<i>purM</i>	Nucleotide transport and metabolism genes	0.1 ± 0.14	0.68 ± 0.44	0.9 ± 0.07
<i>purN</i>	Nucleotide transport and metabolism genes	0.2 ± 0.13	1.81 ± 0.22	1.69 ± 0.28
<i>putA</i>	Energy production and conversion genes	-0.02 ± 0.07	0.85 ± 0.23	0.46 ± 0.91
<i>rbn</i>	General function prediction only genes	0.3 ± 0.32	0.47 ± 0.4	1.13 ± 0.33
<i>rbsB_2</i>	Carbohydrate transport and metabolism genes	-0.02 ± 0.36	0.13 ± 0.18	0.91 ± 0.29
<i>rcpA</i>	Cell motility and secretion genes	-0.08 ± 0.17	0.55 ± 0.25	0.92 ± 0.32
<i>resA</i>	Posttranslational modification, protein turnover, chaperones genes	-0.85 ± 1.54	0.92 ± 0.06	0.84 ± 0.25
<i>rfaF</i>	Cell envelope biogenesis, outer membrane genes	0.89 ± 0.17	0.43 ± 0.21	0.34 ± 0.08
<i>rfb</i>	Cell envelope biogenesis, outer membrane genes	0.01 ± ND	1.66 ± ND	ND
<i>ribD</i>	Coenzyme metabolism genes	0.25 ± 0.41	0.8 ± 0.35	0.86 ± 0.39
<i>rimI</i>	General function prediction only genes	0.92 ± 0.13	-0.11 ± 0.78	ND
<i>rpIA_1</i>	Carbohydrate transport and metabolism genes	-0.08 ± 0.22	0.05 ± 0.29	1.19 ± 0.4
<i>rpIA_2</i>	Carbohydrate transport and metabolism genes	0.16 ± 0.11	0.79 ± 0.1	1.13 ± 0.16
<i>rpSI7</i>	Translation, ribosomal structure and biogenesis genes	0.91 ± 0.22	-0.32 ± 0.45	-0.51 ± 0.5
<i>selA</i>	Amino acid transport and metabolism genes	-0.4 ± 0.32	0.42 ± 0.08	1.23 ± 0.25
<i>serA</i>	Amino acid transport and metabolism genes	0.46 ± 0.07	1.37 ± 0.13	2.32 ± 0.27
<i>serC</i>	Coenzyme metabolism genes	0.13 ± 0.33	0.77 ± 0.05	0.66 ± 0.67

<i>sfb</i>	Translation, ribosomal structure and biogenesis genes	0.84 ± 0.26	0.47 ± 0.22	0.83 ± 0.2
<i>speF</i>	Amino acid transport and metabolism genes	-0.1 ± 0.07	-0.07 ± 0.03	1.33 ± 0.17
<i>tadD</i>	General function prediction only genes	0.86 ± 0.23	0.13 ± 0.09	0.04 ± 0.26
<i>tagI</i>	DNA replication, recombination and repair genes	0.18 ± 0.29	0.67 ± 0.08	1.44 ± 0.28
<i>tal_1</i>	Carbohydrate transport and metabolism genes	0.26 ± 0.55	0.67 ± 0.46	1.16 ± 0.53
<i>tbpA</i>	Coenzyme metabolism genes	-1.37 ± 0.26	-0.09 ± 0.15	0.95 ± 0.43
<i>thrB</i>	Amino acid transport and metabolism genes	0.2 ± 0.06	0.57 ± 0.1	1.01 ± 0.22
<i>tpiA_2</i>	Carbohydrate transport and metabolism genes	0.32 ± 0.51	0.46 ± 0.43	0.87 ± 0.2
<i>trpA</i>	Amino acid transport and metabolism genes	1.89 ± 0.71	1 ± 0.53	0.2 ± 0.37
<i>trpB</i>	Amino acid transport and metabolism genes	1.81 ± 0.44	0.82 ± 0.19	0.57 ± 0.31
<i>trpC</i>	Amino acid transport and metabolism genes	1.09 ± 1.51	0.16 ± 0.27	0.27 ± 1.55
<i>trpE</i>	Amino acid transport and metabolism genes	1.39 ± 1.35	0.2 ± 0.11	0.87 ± 1.12
<i>ttrS</i>	Signal transduction mechanisms genes	0.26 ± 0.22	0.52 ± 0.27	1.22 ± 0.17
<i>ung</i>	DNA replication, recombination and repair genes	0.19 ± 0.36	0.84 ± 0.21	1.07 ± 0.43
<i>uraA</i>	Nucleotide transport and metabolism genes	-0.09 ± 0.1	0.84 ± 0.15	0.74 ± 0.65
<i>uvrB</i>	DNA replication, recombination and repair genes	0.51 ± 0.23	0.54 ± 0.21	0.91 ± 0.64
<i>wbjB</i>	Cell envelope biogenesis, outer membrane genes	1.35 ± 1.24	0.87 ± 0.17	ND
<i>wza</i>	Cell envelope biogenesis, outer membrane genes	1.22 ± 2.26	0.03 ± 0.28	ND
<i>xseA</i>	DNA replication, recombination and repair genes	0.6 ± 0.52	0.53 ± 0.09	0.84 ± ND
<i>ydfG</i>	General function prediction only genes	0.16 ± 0.28	0.68 ± 0.12	1.25 ± 0.06
<i>yfeB</i>	Inorganic ion transport and metabolism genes	0.1 ± 0.22	0.91 ± 0.21	1.7 ± 0.4
<i>yfeC</i>	Inorganic ion transport and metabolism genes	0.02 ± 0.13	0.35 ± 0.06	1.07 ± 0.18
<i>yfeD</i>	Inorganic ion transport and metabolism genes	0.05 ± 0.18	0.54 ± 0.2	1.13 ± 0.2

* Clusters of orthologous groups functional categories (1).

† Expression values are expressed as $\text{Log}_2(\text{average (experimental intensity/control intensity)}) \pm 1 \text{ SD}$

‡ ND indicates no data available

Supplementary Data Table 2. Expression values of *P. multocida* genes significantly down-regulated in any of the three chicken infections

Gene ID	COGs functional category *	Expression values †		
		c1	c2	C3
<i>accB</i>	Lipid metabolism genes	-0.6 ± 0.36	-1.1 ± 0.3	-1.04 ± 0.44
<i>accC</i>	Lipid metabolism genes	-0.33 ± 0.56	-0.58 ± 0.73	-1.25 ± 0.18
<i>accD</i>	Lipid metabolism genes	-0.6 ± 0.47	-0.4 ± 0.5	-1.01 ± 0.58
<i>acrB</i>	Secondary metabolites biosynthesis, transport and catabolism genes	-0.23 ± 0.55	-0.56 ± 0.11	-0.96 ± 0.88
<i>adh2</i>	Energy production and conversion genes	-0.03 ± 0.08	-1 ± 0.28	-1.61 ± 0.09
<i>afuA_2</i>	Coenzyme metabolism genes	-0.12 ± 0.32	-0.24 ± 0.15	-1.08 ± ND ‡
<i>afuB_1</i>	Coenzyme metabolism genes	-0.13 ± 0.16	0.34 ± 0.35	-2.02 ± ND
<i>arcA</i>	Signal transduction mechanisms genes	-0.21 ± 0.46	-1.59 ± 0.24	-1.61 ± 0.5
<i>artI</i>	Amino acid transport and metabolism genes	-1 ± 0.25	-0.49 ± 0.17	0.18 ± 0.18
<i>atpB</i>	Energy production and conversion genes	-0.65 ± 0.48	-0.24 ± 0.67	-0.97 ± 0.43
<i>azlD</i>	Amino acid transport and metabolism genes	0.94 ± ND	-1.06 ± ND	-0.45 ± 1.74
<i>bioD1</i>	Coenzyme metabolism genes	1.03 ± 0.17	-1.99 ± 0.1	-2.27 ± 0.56
<i>brnQ</i>	Amino acid transport and metabolism genes	-1.23 ± 0.36	-0.77 ± 0.07	ND
<i>cutC</i>	Inorganic ion transport and metabolism genes	-0.53 ± 0.15	-1.05 ± 0.09	-1.01 ± 0.1
<i>cvpA</i>	General function prediction only genes	-2.41 ± ND	-0.22 ± 0.09	-0.24 ± 1.65
<i>cycD</i>	Secondary metabolites biosynthesis, transport and catabolism genes	0.17 ± 0.4	-0.17 ± 0.36	-0.92 ± 0.87
<i>cysK</i>	Amino acid transport and metabolism genes	-1.41 ± 1.24	-2.41 ± 0.22	ND
<i>dcuC</i>	Energy production and conversion genes	-0.24 ± 0.33	-1 ± 0.52	-1.36 ± 0.42
<i>debB</i>	Cell envelope biogenesis, outer membrane genes	0.21 ± 0.35	0.01 ± 0.1	-1.32 ± 0.11
<i>dedA</i>	Function unknown genes	-0.89 ± 1.03	-1.16 ± 0.83	-2.21 ± 0.51
<i>dinP</i>	DNA replication, recombination and repair genes	-1.23 ± 0.82	-0.22 ± 0.09	-0.17 ± 0.45
<i>djlA</i>	Posttranslational modification, protein turnover, chaperones genes	-0.21 ± 0.98	-1.01 ± 0.51	ND
<i>dksA</i>	Signal transduction mechanisms genes	-0.34 ± 0.31	-0.83 ± 0.22	-1.04 ± 0.09
<i>dsbA</i>	Posttranslational modification, protein turnover, chaperones genes	-1.14 ± 0.46	-0.48 ± 0.3	-0.73 ± 0.26
<i>dsbC</i>	Posttranslational modification, protein turnover, chaperones genes	-1.45 ± 0.59	-0.7 ± 0.15	-0.66 ± 0.28
<i>era</i>	General function prediction only genes	-0.13 ± 0.29	-0.46 ± 0.11	-0.93 ± 0.07
<i>fabB</i>	Lipid metabolism genes	-0.42 ± 0.27	-0.56 ± 0.17	-0.99 ± 0.21
<i>fabI</i>	Lipid metabolism genes	-0.87 ± 0.34	-1.14 ± 0.6	-1.19 ± 0.71
<i>fdx-1</i>	Energy production and conversion genes	-0.33 ± 0.42	-0.57 ± 0.09	-1.65 ± 0.5
<i>ffh</i>	Cell motility and secretion genes	-0.55 ± 0.15	-0.37 ± 0.1	-0.98 ± 0.32
<i>firA</i>	Cell envelope biogenesis, outer membrane genes	-0.64 ± 0.86	-0.75 ± 0.41	-1.05 ± ND
<i>fkpA</i>	Posttranslational modification, protein turnover, chaperones genes	-0.16 ± 0.14	-0.85 ± 0.17	-0.77 ± 0.21
<i>fnr</i>	Signal transduction mechanisms genes	-0.99 ± 0.25	1.45 ± 0.15	1.21 ± 0.59
<i>folC</i>	Coenzyme metabolism genes	-0.65 ± 0.35	-0.51 ± 0.13	-1.16 ± 0.28
<i>frdB</i>	Energy production and conversion genes	0.09 ± 0.29	-0.53 ± 0.28	-1.55 ± 0.33
<i>frdC</i>	Energy production and conversion genes	-0.76 ± 1.46	-1.16 ± 0.78	-1.96 ± 0.61
<i>ftsJ</i>	Translation, ribosomal structure and biogenesis genes	-0.6 ± 0.19	0.06 ± 0.12	-1.25 ± 0.15
<i>ftsQ</i>	Cell envelope biogenesis, outer membrane genes	-0.2 ± 0.1	0.12 ± 0.51	-1.05 ± 0.46
<i>gidB</i>	Cell envelope biogenesis, outer membrane genes	-0.49 ± 0.05	-0.37 ± 0.28	-1.34 ± 0.14
<i>gloA</i>	Amino acid transport and metabolism genes	-0.46 ± 0.89	-1.02 ± 0.3	ND
<i>glpA</i>	Energy production and conversion genes	-0.77 ± 0.26	-0.81 ± 0.18	-0.39 ± 0.31
<i>glpB</i>	Amino acid transport and metabolism genes	-1.05 ± 0.34	-1.53 ± 0.21	-1.23 ± 0.21
<i>glpC</i>	Energy production and conversion genes	-0.94 ± 0.2	-1.35 ± 0.18	-0.91 ± 0.15
<i>glyS</i>	Translation, ribosomal structure and biogenesis genes	0.35 ± 0.17	-0.81 ± 0.05	0.44 ± ND
<i>gpt</i>	Nucleotide transport and metabolism genes	-0.22 ± 0.15	-0.55 ± 0.88	-1.92 ± 0.11

<i>grx</i>	Posttranslational modification, protein turnover, chaperones genes	-0.48 ± 0.14	-0.6 ± 0.3	-1.06 ± 0.76
<i>hbpA</i>	Amino acid transport and metabolism genes	-3.77 ± 0.37	-3.02 ± 0.17	-2.18 ± 0.44
<i>hemX</i>	Coenzyme metabolism genes	-1.39 ± 1.33	-1.29 ± 1.11	-0.69 ± 1.51
<i>hepA</i>	Transcription genes	0.85 ± 0.53	-0.3 ± 0.09	-1.08 ± 0.67
<i>hexA</i>	Carbohydrate transport and metabolism genes	0.01 ± 0.35	-0.51 ± 0.04	-1.42 ± 0.31
<i>hexB</i>	Cell envelope biogenesis, outer membrane genes	-0.03 ± 0.12	-0.35 ± 0.14	-0.96 ± 0.11
<i>himD</i>	DNA replication, recombination and repair genes	-0.33 ± 0.22	-0.95 ± 0.24	-0.84 ± 0.19
<i>holC</i>	DNA replication, recombination and repair genes	-0.27 ± 0.27	-0.72 ± 0.2	-0.88 ± 0.33
<i>hpaA</i>	Transcription genes	-1.06 ± 0.46	0.34 ± 0.09	0.22 ± 0.31
<i>hsf_1</i>	Not in COGs	-0.83 ± 0.55	-1.05 ± 0.14	0.24 ± 1.44
<i>htrA</i>	Posttranslational modification, protein turnover, chaperones genes	-0.95 ± 0.94	-1.14 ± 0.44	-0.8 ± 0.43
<i>hyaE</i>	Not in COGs	0.22 ± 0.26	-0.67 ± 0.44	-1.21 ± 0.15
<i>infB</i>	Translation, ribosomal structure and biogenesis genes	-0.32 ± 0.17	-0.7 ± 0.2	-0.97 ± 0.12
<i>infC</i>	Translation, ribosomal structure and biogenesis genes	-0.98 ± 0.84	-0.62 ± 0.29	-1.1 ± 0.42
<i>lpp</i>	Cell envelope biogenesis, outer membrane genes	-0.89 ± 0.6	-0.32 ± 0.45	-0.34 ± 0.6
<i>mclA</i>	Signal transduction mechanisms genes	-1.83 ± 0.75	-1.41 ± 0.09	-0.67 ± 0.27
<i>merT</i>	Not in COGs	-1.12 ± 0.68	-0.47 ± 0.56	-0.3 ± 0.45
<i>metX</i>	Coenzyme metabolism genes	-0.69 ± 0.26	-0.21 ± 0.21	-1.14 ± 0.11
<i>mraY</i>	Cell envelope biogenesis, outer membrane genes	-0.09 ± 0.08	-0.02 ± 0.11	-0.94 ± 0.17
<i>mreB</i>	Cell division and chromosome partitioning	-0.47 ± 0.22	-0.62 ± 0.19	-1.26 ± 0.16
<i>murZ</i>	Cell envelope biogenesis, outer membrane genes	-0.95 ± 0.31	-1.06 ± 0.3	-1.78 ± 0.23
<i>ner</i>	Transcription genes	-4.06 ± ND	ND	-0.02 ± 0.61
<i>nrfC</i>	Energy production and conversion genes	0.99 ± 0.07	0.41 ± 0.41	-1.38 ± 0.25
<i>nrfD</i>	Inorganic ion transport and metabolism genes	0.6 ± 0.06	-0.2 ± 0.14	-1.4 ± 0.26
<i>nth</i>	DNA replication, recombination and repair genes	-0.07 ± 0.09	-0.52 ± 0.1	-1.1 ± 0.15
<i>nudH</i>	DNA replication, recombination and repair genes	-0.96 ± 0.65	-0.52 ± 0.32	-0.37 ± 0.36
<i>nusA</i>	Transcription genes	-0.19 ± 1.21	-1.78 ± 0.45	-0.51 ± 0.26
<i>nusB</i>	Transcription genes	-0.16 ± 0.16	-0.84 ± 0.14	-1.12 ± 0.3
<i>ompW</i>	Cell envelope biogenesis, outer membrane genes	-0.1 ± 0.15	-0.36 ± 0.43	-1.5 ± 0.24
<i>ordL</i>	Amino acid transport and metabolism genes	0.15 ± 0.1	-0.4 ± 0.17	-0.95 ± 0.28
<i>panF</i>	Amino acid transport and metabolism genes	-0.47 ± 0.25	-0.09 ± 0.35	-1.12 ± ND
<i>pckA</i>	Energy production and conversion genes	-0.19 ± 0.49	-0.7 ± 0.07	-0.95 ± 0.21
<i>pgpA</i>	Lipid metabolism genes	0.13 ± 0.15	-0.55 ± 0.15	-1.38 ± 0.2
<i>phnA</i>	Inorganic ion transport and metabolism genes	0.02 ± 0.48	-0.31 ± 0.63	-1 ± 0.5
<i>plpB</i>	General function prediction only genes	ND	ND	-1.41 ± 0.65
<i>plpP</i>	Not in COGs	0.05 ± 0.91	-0.95 ± 1.21	-1.24 ± 0.66
<i>PM0038</i>	General function prediction only genes	-2.94 ± 0.16	-2.63 ± 0.32	-2.51 ± 0.69
<i>PM0041</i>	Lipid metabolism genes	-0.23 ± 0.25	-0.78 ± 0.32	-1.05 ± 0.4
<i>PM0081</i>	General function prediction only genes	-0.97 ± 0.6	-0.21 ± 0.71	-0.91 ± 0.49
<i>PM0108</i>	Function unknown genes	-0.78 ± 0.27	-0.39 ± 0.15	-1.47 ± 0.5
<i>PM0109</i>	Not in COGs	0.05 ± 1.37	-0.05 ± 0.42	-1.02 ± 0.6
<i>PM0157</i>	Not in COGs	-0.9 ± 2.25	-0.2 ± 0	-0.67 ± 0.94
<i>PM0159</i>	General function prediction only genes	-2.05 ± 0.23	-2.55 ± 0.37	-2.71 ± 0.41
<i>PM0163</i>	General function prediction only genes	-0.59 ± 0.11	-0.49 ± 0.15	-1.46 ± 0.41
<i>PM0166</i>	Function unknown genes	ND	ND	-1.04 ± ND
<i>PM0175</i>	General function prediction only genes	-0.55 ± 0.56	-0.14 ± 0.31	-1.05 ± 0.28
<i>PM0176</i>	General function prediction only genes	-0.98 ± 0.65	-0.62 ± 0.25	-1.35 ± 0.38
<i>PM0178</i>	General function prediction only genes	-0.28 ± 0.39	-2.1 ± 0.09	-0.58 ± ND
<i>PM0179</i>	Signal transduction mechanisms genes	-1.04 ± 0.01	-0.51 ± 0.46	-0.53 ± 0.6
<i>PM0205</i>	Function unknown genes	-0.47 ± 1.4	-1.26 ± 0.45	-1.19 ± 0.8
<i>PM0209</i>	Transcription genes	-1.16 ± 0.39	-0.39 ± 0.19	-1.48 ± 0.22
<i>PM0212</i>	Function unknown genes	-1.67 ± 0.14	-0.43 ± 0.66	0.54 ± 0.8
<i>PM0213</i>	Function unknown genes	-1.85 ± 0	-0.04 ± 0.58	-0.33 ± 1.37
<i>PM0231</i>	General function prediction only genes	-0.06 ± 0.19	-0.5 ± 0.21	-1.42 ± 0.3

<i>PM0233</i>	Posttranslational modification, protein turnover, chaperones genes	-0.23 ± 0.35	-0.44 ± 0.11	-1.22 ± 0.3
<i>PM0241</i>	Inorganic ion transport and metabolism genes	-0.47 ± 0.14	-0.83 ± 0.38	-1.2 ± 0.4
<i>PM0243</i>	Cell envelope biogenesis, outer membrane genes	-1.24 ± 0.14	-1.07 ± 0.2	-1.2 ± 0.14
<i>PM0245</i>	Lipid metabolism genes	0.27 ± 0.15	-0.13 ± 0.09	-0.88 ± 0.25
<i>PM0250</i>	Inorganic ion transport and metabolism genes	-0.49 ± 0.12	-0.96 ± 0.13	-0.78 ± 0.16
<i>PM0251</i>	Function unknown genes	-0.4 ± 0.12	-0.25 ± 0.26	-0.9 ± 0.36
<i>PM0271</i>	Function unknown genes	-0.76 ± 0.42	-0.63 ± 0.19	-1.09 ± 0.12
<i>PM0309</i>	Not in COGs	1.81 ± ND	ND	-1.91 ± 1.91
<i>PM0310</i>	Not in COGs	-2.2 ± 0.66	-1.02 ± 2.3	-1.81 ± 0.17
<i>PM0311</i>	Function unknown genes	-1.17 ± 0.28	-0.25 ± 0.43	0.2 ± 0.3
<i>PM0335</i>	General function prediction only genes	-2.15 ± 0.47	-2.79 ± 1.12	-4.44 ± 0.44
<i>PM0338</i>	Secondary metabolites biosynthesis, transport and catabolism genes	-2.02 ± 0.85	ND	0.4 ± 1.06
<i>PM0372</i>	Amino acid transport and metabolism genes	-0.96 ± 0.22	0.29 ± 0.1	-0.11 ± 0.48
<i>PM0377</i>	Coenzyme metabolism genes	-1.26 ± 0.16	-0.45 ± 0.36	-0.68 ± 0.31
<i>PM0380</i>	General function prediction only genes	0.3 ± 0.29	-0.52 ± 0.19	-0.93 ± 0.26
<i>PM0402</i>	General function prediction only genes	-1.43 ± 0.31	-1.44 ± 0.29	-1.46 ± 0.24
<i>PM0415</i>	Not in COGs	ND	ND	-1.67 ± 0.31
<i>PM0424</i>	Not in COGs	-0.9 ± 2.29	-0.04 ± 0.74	0.91 ± 0.26
<i>PM0445</i>	Not in COGs	-0.38 ± 0.42	-0.4 ± 0.16	-1.07 ± 0.59
<i>PM0478</i>	Function unknown genes	-2.43 ± ND	ND	-0.86 ± 1.19
<i>PM0479</i>	Translation, ribosomal structure and biogenesis genes	-0.19 ± 0.36	-0.31 ± 0.2	-1.15 ± 0.25
<i>PM0488</i>	Not in COGs	-2.29 ± ND	-0.48 ± ND	-0.3 ± 1.24
<i>PM0494</i>	Not in COGs	ND	ND	-1.27 ± 0.96
<i>PM0539</i>	Function unknown genes	-0.3 ± 0.2	-0.34 ± 0.22	-1.14 ± 0.22
<i>PM0575</i>	Inorganic ion transport and metabolism genes	-0.5 ± 0.22	-1.07 ± 0.07	-1.83 ± 0.27
<i>PM0591</i>	Function unknown genes	-0.94 ± 0.68	-1.08 ± 0.42	-1.49 ± 1.59
<i>PM0594</i>	Function unknown genes	-1.32 ± 0.79	ND	0.16 ± 2.46
<i>PM0595</i>	Function unknown genes	0.95 ± 1.27	-0.35 ± 0.09	-2.2 ± 0
<i>PM0610</i>	Not in COGs	-0.53 ± 0.18	-0.72 ± 0.21	-1.37 ± 0.14
<i>PM0614</i>	Not in COGs	-1.63 ± 1.15	0.41 ± 1.16	-0.86 ± ND
<i>PM0663</i>	Not in COGs	-0.15 ± 0.11	-1.46 ± ND	ND
<i>PM0679</i>	Function unknown genes	0.28 ± 2.56	ND	-1.19 ± ND
<i>PM0682</i>	Not in COGs	-1.23 ± 0.82	-1.65 ± 0.91	-1.7 ± 0.5
<i>PM0688</i>	Function unknown genes	0.21 ± 0.06	-2.08 ± 0.21	-1.44 ± 0.25
<i>PM0689</i>	Not in COGs	-0.26 ± 0.25	-0.22 ± 0.3	-1.17 ± 0.12
<i>PM0697</i>	Not in COGs	1 ± ND	ND	-1.63 ± ND
<i>PM0727</i>	Amino acid transport and metabolism genes	-0.01 ± 0.19	-0.61 ± 0.18	-1.07 ± 0.13
<i>PM0761</i>	Function unknown genes	-1 ± 0.23	-1.15 ± 0.11	-2.02 ± 0.26
<i>PM0768</i>	Not in COGs	-1.52 ± 0.27	-0.65 ± 0.47	-0.43 ± 0.67
<i>PM0770</i>	Function unknown genes	0 ± 0	-0.84 ± 2.04	-0.33 ± 0.75
<i>PM0782</i>	Posttranslational modification, protein turnover, chaperones genes	-0.6 ± 0.16	-0.8 ± 0.32	-0.74 ± 0.11
<i>PM0783</i>	General function prediction only genes	-0.22 ± 0.26	-0.37 ± 0.2	-1.23 ± 0.3
<i>PM0805</i>	Not in COGs	ND	ND	-2.67 ± ND
<i>PM0809</i>	Function unknown genes	-0.37 ± 0.69	-0.42 ± 0.18	-1.1 ± 0.25
<i>PM0834</i>	Carbohydrate transport and metabolism genes	0.22 ± 0.33	-0.8 ± 0.25	-1.33 ± 0.35
<i>PM0859</i>	Function unknown genes	0.53 ± 2.01	-1.36 ± ND	-0.97 ± 0.26
<i>PM0879</i>	Cell envelope biogenesis, outer membrane genes	-0.06 ± 0.29	-0.14 ± 0.05	-1.14 ± 0.22
<i>PM0901</i>	Not in COGs	-0.68 ± 0.21	-1.78 ± 0.4	-2.34 ± 0.17
<i>PM0931</i>	Not in COGs	-1.97 ± 1.38	-0.83 ± ND	ND
<i>PM0935</i>	Function unknown genes	0.07 ± 0.37	0.5 ± 0.07	-1.85 ± ND
<i>PM0939</i>	Inorganic ion transport and metabolism genes	0.09 ± 0.2	-0.85 ± 0.05	ND
<i>PM0946</i>	Function unknown genes	-1.01 ± 0.27	-0.59 ± 0.06	ND
<i>PM0964</i>	Not in COGs	-2.12 ± 0.62	-1.19 ± ND	ND

<i>PM0965</i>	Not in COGs	-2.62 ± 0.85	-2.77 ± 0.45	-1.45 ± ND
<i>PM0971</i>	General function prediction only genes	-1.23 ± 0.18	-0.63 ± ND	ND
<i>PM0980</i>	Function unknown genes	-0.52 ± 0.26	-0.15 ± 0.17	-1.02 ± ND
<i>PM1005</i>	Not in COGs	-1.52 ± 1.94	-0.46 ± ND	ND
<i>PM1033</i>	Cell motility and secretion genes	-0.44 ± 0.24	-0.15 ± 0.06	-1.1 ± 0.24
<i>PM1049</i>	Carbohydrate transport and metabolism genes	-1.12 ± 0.39	-0.74 ± 0.36	-1.14 ± 0.28
<i>PM1058</i>	Not in COGs	-2.38 ± ND	-1.02 ± 1.52	-0.75 ± 0.18
<i>PM1081</i>	Inorganic ion transport and metabolism genes	0.08 ± 1.12	0.02 ± 0.28	-1.73 ± 0.26
<i>PM1084</i>	Not in COGs	-1.29 ± 0.09	-0.63 ± 0.72	0.46 ± 0.81
<i>PM1090</i>	Function unknown genes	-0.79 ± 0.14	-1 ± 0.16	-0.82 ± ND
<i>PM1123</i>	Not in COGs	-1.25 ± 0.27	-1.17 ± ND	-0.7 ± 1.29
<i>PM1135</i>	Transcription genes	-0.85 ± 0.19	-0.64 ± 0.28	-1.15 ± 0.21
<i>PM1140</i>	Cell envelope biogenesis, outer membrane genes	0.21 ± 0.72	-0.29 ± 0.02	-2.41 ± ND
<i>PM1170</i>	Function unknown genes	-1.28 ± 1.26	-0.19 ± ND	-0.65 ± 0.83
<i>PM1172</i>	Function unknown genes	0.38 ± 1.88	0.9 ± 0.75	-1.01 ± 0.76
<i>PM1220</i>	Not in COGs	-0.54 ± 0.6	-0.25 ± 0.53	-1.12 ± 0.33
<i>PM1232</i>	Coenzyme metabolism genes	-2.26 ± 1.17	-1.9 ± 0.85	-0.82 ± ND
<i>PM1233</i>	Coenzyme metabolism genes	-1.87 ± 1.06	-2.01 ± 0.63	-0.92 ± 0.12
<i>PM1265</i>	Inorganic ion transport and metabolism genes	-0.64 ± 0.31	-0.87 ± 0.37	-0.79 ± 0.18
<i>PM1266</i>	Inorganic ion transport and metabolism genes	-0.47 ± 0.66	-1.05 ± 0.3	-0.54 ± 0.07
<i>PM1279</i>	Function unknown genes	-1.61 ± ND	0.05 ± 0.32	0.33 ± 1.88
<i>PM1292</i>	Nucleotide transport and metabolism genes	-0.7 ± 0.77	-0.89 ± 0.33	-0.4 ± 0.06
<i>PM1299</i>	Energy production and conversion genes	1.34 ± 0.23	-0.42 ± 0.2	-0.96 ± 0.46
<i>PM1363</i>	Carbohydrate transport and metabolism genes	-1.38 ± 0.57	-0.07 ± 0.06	0.61 ± 0.69
<i>PM1472</i>	General function prediction only genes	-1.19 ± 0.22	-1.07 ± 0.38	-0.67 ± 0.5
<i>PM1475</i>	Carbohydrate transport and metabolism genes	-0.13 ± 0.49	-0.25 ± 0.11	-1.05 ± 0.75
<i>PM1478</i>	Not in COGs	-0.73 ± 0.46	-0.82 ± 0.06	-0.24 ± 0.17
<i>PM1483</i>	Function unknown genes	-1.74 ± ND	-0.43 ± 0.55	0.14 ± 1.09
<i>PM1487</i>	Energy production and conversion genes	-0.68 ± 0.81	-0.68 ± 0.19	-1.28 ± 0.37
<i>PM1513</i>	Translation, ribosomal structure and biogenesis genes	-0.34 ± 0.19	-0.8 ± 0.21	-0.96 ± 0.22
<i>PM1540</i>	Not in COGs	1.08 ± 1.27	-0.09 ± 0.07	-1.85 ± 2.12
<i>PM1543</i>	Not in COGs	-1.33 ± 0.26	-0.73 ± ND	-2.12 ± ND
<i>PM1565</i>	Function unknown genes	-0.52 ± 0.36	-1.29 ± 0.29	-0.99 ± 0.23
<i>PM1566</i>	Function unknown genes	-1.84 ± 0.41	-1.66 ± 0.21	-1.84 ± 0.21
<i>PM1603</i>	Not in COGs	-0.05 ± 1.12	-1.31 ± 0	-0.64 ± 1.11
<i>PM1623</i>	Not in COGs	-0.74 ± 0.17	-0.93 ± 0.15	-1.52 ± 0.15
<i>PM1634</i>	Function unknown genes	-1.79 ± 1.05	0.63 ± 0.41	0.2 ± 1.17
<i>PM1655</i>	Not in COGs	-1.1 ± 0.33	-0.55 ± 0.39	-1.31 ± 0.33
<i>PM1726</i>	Coenzyme metabolism genes	ND	ND	-1.95 ± 0.25
<i>PM1728</i>	General function prediction only genes	-1.09 ± 0.21	-0.59 ± 0.13	-0.6 ± 0.31
<i>PM1735</i>	DNA replication, recombination and repair genes	1.68 ± 2.35	-0.01 ± 0	-0.93 ± 0.62
<i>PM1759</i>	General function prediction only genes	1.24 ± 0.38	-0.21 ± 0.3	-0.92 ± 1.65
<i>PM1763</i>	Cell motility and secretion genes	0.14 ± 2.94	0.24 ± 0	-1.42 ± 0.91
<i>PM1771</i>	Not in COGs	0.03 ± 2.21	-0.64 ± 0.4	-1.03 ± 1.09
<i>PM1773</i>	Not in COGs	-3.34 ± ND	ND	-1.95 ± 1.15
<i>PM1779</i>	Not in COGs	-0.32 ± 0.77	-0.35 ± 0.12	-1.03 ± 0.12
<i>PM1783</i>	Not in COGs	-1.4 ± ND	0.06 ± 2.73	-0.54 ± 0.82
<i>PM1804</i>	Secondary metabolites biosynthesis, transport and catabolism genes	-0.06 ± 0.38	-0.35 ± 0.19	-0.94 ± 0.5
<i>PM1838</i>	Coenzyme metabolism genes	-0.92 ± 0.75	0.36 ± 0.3	0.34 ± 0.19
<i>PM1849</i>	Carbohydrate transport and metabolism genes	-1.54 ± 0.16	-2.5 ± 0.13	-0.74 ± 0.1
<i>PM1854</i>	Energy production and conversion genes	0.21 ± 0.15	-0.69 ± 0.26	-1.08 ± 0.15
<i>PM1855</i>	Function unknown genes	0.21 ± 0.07	-1.05 ± 0.11	-1.55 ± 0.48
<i>PM1857</i>	Translation, ribosomal structure and biogenesis genes	-0.2 ± 0.08	-0.45 ± 0.32	-1.22 ± 0.39
<i>PM1882</i>	Nucleotide transport and metabolism genes	-0.27 ± 0.6	2.3 ± ND	-1.52 ± ND
<i>PM1889</i>	Function unknown genes	-1.22 ± 0.47	-1.22 ± 0.2	-1.96 ± 0.48

<i>PM1890</i>	Function unknown genes	-0.92 ± 0.52	-0.21 ± 0.37	-0.59 ± 0.36
<i>PM1911</i>	General function prediction only genes	0.01 ± 0.54	-0.06 ± 0.51	-1.21 ± 0.66
<i>PM1926</i>	Cell envelope biogenesis, outer membrane genes	-0.9 ± 0.37	-1.19 ± 0.16	-1.69 ± 0.16
<i>PM1931</i>	Not in COGs	0.47 ± 1.56	0.16 ± 0.41	-1.38 ± 0.12
<i>PM1932</i>	Not in COGs	-0.96 ± 0.38	-1.27 ± 0.65	-1.58 ± 0.88
<i>PM1934</i>	Not in COGs	-1 ± ND	ND	-1.53 ± 0.33
<i>PM1935</i>	Not in COGs	-0.53 ± 2.03	-0.29 ± 0.07	-1.83 ± 0.71
<i>PM1938</i>	Secondary metabolites biosynthesis, transport and catabolism genes	-1.55 ± ND	ND	-1.26 ± 1.55
<i>PM1968</i>	Secondary metabolites biosynthesis, transport and catabolism genes	-2.83 ± 0.11	1.07 ± 0.64	-0.16 ± 0.52
<i>PM1971</i>	Carbohydrate transport and metabolism genes	-0.29 ± 0.24	-0.18 ± 0.22	-2.35 ± 0.57
<i>PM1972</i>	Not in COGs	-0.97 ± 1.48	-0.37 ± 0.78	-0.21 ± 0.41
<i>PM1974</i>	Function unknown genes	-0.79 ± 0.18	-1.51 ± 0.09	-1.08 ± 0.22
<i>PM2006</i>	General function prediction only genes	-1.1 ± ND	ND	ND
<i>potC</i>	Amino acid transport and metabolism genes	-0.49 ± 0.61	-0.17 ± 0.46	-1.11 ± 0.61
<i>prfC</i>	Translation, ribosomal structure and biogenesis genes	-0.21 ± 0.33	-0.63 ± 0.33	-1.14 ± 0.46
<i>proQ</i>	Signal transduction mechanisms genes	-0.88 ± 0.49	-0.65 ± 0.15	-1.27 ± ND
<i>pstB</i>	Inorganic ion transport and metabolism genes	-1.77 ± ND	ND	-0.68 ± 1.34
<i>pth</i>	Translation, ribosomal structure and biogenesis genes	-0.62 ± 0.37	-0.77 ± 0.26	-2.57 ± 0.36
<i>ptsB</i>	Carbohydrate transport and metabolism genes	-1.76 ± 0.52	-2.09 ± 0.69	-1.84 ± 0.38
<i>ptsI</i>	Carbohydrate transport and metabolism genes	0.82 ± 0.28	0.03 ± 0.3	-1.03 ± 0.32
<i>pyrR</i>	Nucleotide transport and metabolism genes	-0.15 ± 0.22	-0.68 ± 0.13	-1.05 ± 0.25
<i>rho</i>	Transcription genes	-0.29 ± 0.44	-0.59 ± 0.45	-1.03 ± 0.29
<i>ribH</i>	Coenzyme metabolism genes	-0.16 ± 0.45	-0.27 ± 0.44	-0.95 ± 0.22
<i>rnb</i>	Transcription genes	-0.29 ± 0.08	-0.78 ± 0.21	-1.04 ± 0.06
<i>rpL25</i>	Translation, ribosomal structure and biogenesis genes	-0.04 ± 1.2	-0.32 ± 1.02	-0.89 ± 1.14
<i>rpL27</i>	Translation, ribosomal structure and biogenesis genes	-0.8 ± 0.22	-0.76 ± 0.26	-1.33 ± 0.12
<i>rpL30</i>	Translation, ribosomal structure and biogenesis genes	-0.29 ± 1.47	-0.89 ± 0.72	-1.04 ± 0.77
<i>rpL32</i>	Translation, ribosomal structure and biogenesis genes	-0.02 ± 0.5	-1.18 ± 0.01	-0.62 ± 0.39
<i>rpL34</i>	Translation, ribosomal structure and biogenesis genes	-1.07 ± ND	-1.67 ± ND	-1.15 ± 1.95
<i>rpL35</i>	Translation, ribosomal structure and biogenesis genes	-1.95 ± 0.21	-2.07 ± 0.33	-1.78 ± 0.35
<i>rpoE</i>	Transcription genes	-1.56 ± 0.71	-0.85 ± 0.71	-0.84 ± 0.49
<i>rpoH</i>	Transcription genes	-1.05 ± 0.55	-0.25 ± 0.27	-0.59 ± 0.37
<i>rpS14</i>	Translation, ribosomal structure and biogenesis genes	0.07 ± 0.38	-0.84 ± 0.1	-0.35 ± 0.18
<i>rpS15</i>	Translation, ribosomal structure and biogenesis genes	ND	ND	-1.75 ± 0.3
<i>rpS21</i>	Translation, ribosomal structure and biogenesis genes	-0.78 ± 0.16	-0.92 ± 0.12	-1.53 ± 0.12
<i>rseB</i>	Signal transduction mechanisms genes	-2.08 ± 0.18	-1.5 ± 0.16	-1.21 ± 0.14
<i>scrB</i>	Carbohydrate transport and metabolism genes	-0.44 ± 0.53	-1.11 ± 0.19	-0.87 ± 0.4
<i>secE</i>	Cell motility and secretion genes	-0.49 ± 0.13	-0.28 ± 0.24	-1.12 ± 0.28
<i>secG</i>	Cell motility and secretion genes	-0.87 ± 0.68	-1.01 ± 0.15	-1.2 ± 0.38
<i>speE</i>	Amino acid transport and metabolism genes	-0.18 ± 0.23	-0.39 ± 0.19	-0.96 ± 0.23
<i>srfB</i>	Not in COGs	-1.26 ± ND	-1.06 ± ND	0.45 ± 0.49
<i>sspB</i>	General function prediction only genes	-0.59 ± 0.26	-0.36 ± 0.15	-1.33 ± 0.14
<i>suhB</i>	Carbohydrate transport and metabolism genes	-0.29 ± 0.14	-0.54 ± 0.39	-1.85 ± 0.37
<i>tbpA</i>	Coenzyme metabolism genes	-1.37 ± 0.26	-0.09 ± 0.15	0.95 ± 0.43
<i>tenA</i>	Transcription genes	-2.48 ± 0.99	-1.5 ± 0.07	-0.02 ± 0.06
<i>tgt</i>	Translation, ribosomal structure and biogenesis genes	-0.85 ± 0.37	-0.9 ± 0.11	-1.1 ± 0.46
<i>thiL</i>	Coenzyme metabolism genes	0.17 ± 0.17	-0.17 ± 0.4	-1.11 ± 0.06
<i>thiM</i>	Coenzyme metabolism genes	-1.12 ± 0.33	-1.04 ± 0.24	0.27 ± 0.24
<i>tldD</i>	General function prediction only genes	-0.14 ± 0.12	-0.14 ± 0.12	-1.22 ± 0.14
<i>tolA</i>	Cell envelope biogenesis, outer membrane genes	-0.53 ± 0.04	-1.22 ± 0.06	ND
<i>tolQ</i>	Cell motility and secretion genes	-1.36 ± 0.32	-1.11 ± 0.04	ND
<i>tolR</i>	Cell motility and secretion genes	-1.73 ± 1.93	-1.39 ± ND	ND
<i>trmA</i>	Translation, ribosomal structure and biogenesis genes	-0.94 ± 0.13	-0.6 ± 0.1	-1.72 ± 0.16
<i>trpR</i>	Transcription genes	ND	-0.94 ± 1.11	0.45 ± 1

<i>ubiA</i>	Coenzyme metabolism genes	0.01 ± 0.08	-0.32 ± 0.17	-0.89 ± 0.12
<i>ubiX</i>	Coenzyme metabolism genes	-0.14 ± 0.29	-1.12 ± 0.37	-0.26 ± 0.7
<i>uhpB</i>	Signal transduction mechanisms genes	0.18 ± 1.83	-1.05 ± 0.53	-0.71 ± 1.06
<i>wzs</i>	Cell motility and secretion genes	-1.97 ± ND	-1.16 ± ND	ND
<i>xseB</i>	DNA replication, recombination and repair genes	-1.54 ± 0.39	-0.34 ± 0.29	0.19 ± 0.56
<i>yebM</i>	Inorganic ion transport and metabolism genes	-0.58 ± 0.22	-1.25 ± 0.12	-1.21 ± 0.26
<i>ygiY</i>	Signal transduction mechanisms genes	-1.32 ± 0.32	-0.16 ± 0.57	-1.04 ± 0.76

* Clusters of orthologous groups functional categories (1).

† Expression values are expressed as Log₂(average (experimental intensity/control intensity)) ± 1 SD

‡ ND indicates no data available

References

1. **Tatusov, R. L., E. V. Koonin, and D. J. Lipman** 1997. A genomic perspective on protein families. *Science*. **278**:631-637.