

Table S1. Differentially expressed *Photorhabdus temperata* genes in *Heterorhabditis bacteriophora* infective juveniles

Class	Gene -Possible function	Id/Sim%	Span	E-value
Cell surface	<u>ompH</u> (+) -Outer membrane protein skp precursor (<i>Photorhabdus luminescens</i> , plu0681)	91/98	165	1e-11
	<u>motA</u> (-) -Chemotaxis protein (<i>Photorhabdus luminescens</i> , plu1849)	91/94	165	1e-27
	<u>pilN</u> (-) -Probable outer membrane lipoprotein (<i>P. luminescens</i> , plu1051)	100/100	182	2e-31
	<u>ycfM</u> (-) -Putative outer membrane lipoprotein (<i>P. luminescens</i> , plu2824)	93/100	139	7e-20
Regulation	<u>fliA</u> (+) -Flagella biosynthesis RNA polymerase sigma factor (<i>P. luminescens</i> , plu1955)	98/100	150	8e-20
	<u>infC</u> (+) -Translation initiation factor IF-3 (<i>Erwinia carotovora</i> , ECA2421; <i>P. luminescens</i> , plu2668)	92/97	219	8e-31
	<u>padR</u> (+) -Transcriptional regulator PadR-like family (<i>Xanthobacter autotrophicus</i> , Xaut_3967)	71/85	174	5e-18
	<u>rpoD</u> (+) -RNA polymerase sigma factor (<i>P. luminescens</i> , plu3979)	87/98	135	5e-15
	<u>tufA</u> (+) -Translation elongation factor (<i>P. luminescens</i> , plu4730)	97/100	137	1e-23
	<u>gntR</u> (-) -Repressor of gluconate operon (<i>P. luminescens</i> , plu0496)	87/91	169	9e-26
	<u>malT</u> (-) -Positive regulator of mal operon (<i>P. luminescens</i> , plu0471)	93/100	129	5e-14
	<u>oxyR</u> (-) -Hydrogen peroxide-inducible genes activator (<i>P. luminescens</i> , plu4740)	82/88	153	5e-17
	<u>priA</u> (-) -Primosomal protein N', replication factor Y (<i>P. luminescens</i> , plu4759)	77/83	186	3e-22
	Stress response	<u>bfr</u> (+) -Bacterioferritin (<i>P. luminescens</i> , plu4728)	98/100	186
<u>gloA</u> (+) -Glyoxalase/Bleomycin resistance protein/dioxygenase (<i>P. luminescens</i> , plu3746)		63/80	177	7e-17
<u>dnaK</u> (+) -Chaperone (<i>P. luminescens</i> , plu0579)		100/100	141	5e-26
<u>marC</u> (+) -Probable multiple antibiotic resistance protein (<i>P. luminescens</i> , plu2495)		90/90	180	1e-22
<u>surA</u> (+) -Peptidyl-prolyl cis-trans isomerase (<i>P. luminescens</i> , plu0611)		90/93	195	3e-26
(+) -Probable protein involved in antibiotic biosynthesis (<i>P.</i>		82/88	203	6e-30

	<i>luminescens</i> , plu3130)			
	(+) -Probable protein involved in antibiotic biosynthesis (<i>P. luminescens</i> , plu3263)	100/100	164	8e-32
	acrA (-) -Acriflavin resistance protein/Multidrug efflux protein (<i>P. luminescens</i> , plu3851)	75/76	194	5e-26
	imp (-) -Organic solvent tolerance protein precursor (<i>P. luminescens</i> , plu0612)	94/98	148	9e-29
	(-) -Probable peptide synthetase involved in antibiotic synthesis (<i>P. luminescens</i> , plu3123)	83/95	125	2e-16
Nucleic acid modification	deaD (+) -Inducible ATP-independent RNA helicase (<i>P. luminescens</i> , plu4523)	100/100	174	1e-16
	orn (+) -Oligoribonuclease (<i>P. luminescens</i> , plu4595)	98/98	174	1e-24
	rep (+) -ABC-type DNA helicase (<i>P. luminescens</i> , plu4667)	100/100	171	5e-25
	ydaB (+) -Tail fibre protein (<i>P. luminescens</i> , plu1464)	73/79	168	4e-17
	(+) - ISSod6 transposase (<i>Alteromonas macleodii</i> , MADE_01489)	74/84	171	6e-16
	(+) - IS630-family transposase (<i>P. luminescens</i> , plu4076)	92/94	133	1e-16
	tnpA (-) -Putative ATP-binding IS21-family transposase (<i>Escherichia coli</i> , ECS88_4898)	78/90	144	2e-22
	uvrD (-) -UvrD-family helicase (<i>Escherichia coli</i> , EcE24377A_3362)	65/84	176	3e-17
	(-) -IS982-family transposase (<i>P. luminescens</i> , plu3299)	54/73	193	5e-19
	(-) -IS630-family transposase (<i>P. luminescens</i> , plu0310)	68/78	197	3e-14
	(-) -IS4-family transposase (<i>Shewanella</i> sp, Sputw3181_2039)	68/76	127	2e-15
Transport	atpA (+) -ATP synthase alpha chain (<i>P. luminescens</i> , plu0042)	94/98	142	4e-26
	atpG (+) -ATP synthase subunit C (<i>P. luminescens</i> , plu0041)	100/100	183	2e-27
	atpI (+) -ATP synthase subunit I (<i>P. luminescens</i> , plu0047)	88/93	177	2e-11
	corC (+) -Mg ²⁺ /Co ²⁺ efflux protein (<i>P. luminescens</i> , plu1309)	98/98	132	3e-16
	nhaB (+) -Na ⁺ /H ⁺ antiporter (<i>P. luminescens</i> , plu2563)	91/96	243	3e-26
	traM (+) -Tram protein (<i>Serratia entomophila</i> , AF135182)	76/88	126	5e-12
	yiua (+) -Periplasmic siderophore binding protein of ABC transporter (<i>P. luminescens</i> , plu2853)	68/83	207	1e-20
	(+) -Probable type IV secretion protein (<i>P. luminescens</i> , plu0371)	98/98	150	2e-21
	dctQ (-) -Tripartite ATP-independent periplasmic (TRAP) C4-dicarboxylate transporter (<i>Vibrio vulnificus</i> , VPA1703; <i>P. luminescens</i> , plu0174)	50/67	138	2e-13

	<u>nuoN</u> (-) -NADH dehydrogenase subunit N (<i>P. luminescens</i> , plu3077)	82/94	297	8e-39
	<u>phoU</u> (-) -Phosphate transporter (<i>P. luminescens</i> , plu0218)	100/100	129	3e-19
	<u>secD</u> (-) -Protein-export protein (<i>P. luminescens</i> , plu3902)	95/97	154	6e-21
	<u>tctC</u> (-) -Tricarboxylic transporter (<i>P. luminescens</i> , plu3181)	100/100	105	1e-12
	<u>treB</u> (-) -PTS system, trehalose-permease IIBC component (<i>P. luminescens</i> , plu3288)	72/80	186	3e-22
	<u>trkA</u> (-) -K+ importer (<i>P. luminescens</i> , plu4671)	77/87	232	2e-32
	<u>ybhS</u> (-) -ABC-type sodium efflux transporter permease protein (<i>P. luminescens</i> , plu1507)	94/97	102	2e-5
Metabolism	<u>argG</u> (+) -Argininosuccinate synthase (<i>P. luminescens</i> , plu4742)	87/94	141	3e-16
	<u>fabA</u> (+) -Beta-ketoacyl synthase (<i>Saccharopolyspora erythraea</i> , SACE_0023)	44/63	237	8e-15
	<u>gntY</u> (+) -Probable gluconate metabolism protein involved in iron-sulfur cluster biosynthesis (<i>P. luminescens</i> , plu0198)	94/100	159	5e-24
	<u>ileS</u> (+) -Isoleucyl-tRNA synthetase (<i>P. luminescens</i> , plu0591)	87/100	159	6e-21
	<u>metL</u> (+) -Aspartate kinase II/Homoserine dehydrogenase II (<i>P. luminescens</i> , plu4755)	100/100	156	1e-21
	<u>pdxY</u> (+) -Pyridoxine kinase (<i>P. luminescens</i> , plu2595)	94/95	234	3e-37
	<u>proA</u> (+) - γ -glutamyl phosphate reductase (<i>P. luminescens</i> , plu1244)	91/95	240	5e-35
	<u>ptsO</u> (+) -Phosphocarrier protein (<i>P. luminescens</i> , plu4045)	93/98	168	6e-21
	<u>purL</u> (+) -Phosphoribosylformylglycinamide synthase (<i>P. luminescens</i> , plu3317)	98/100	186	2e-27
	<u>rpe</u> (+) -Ribulose-5-Phosphate 3-epimerase (<i>P. luminescens</i> , plu0086)	98/98	186	2e-28
	<u>sixA</u> (+) -Phosphohistidine phosphatase (<i>P. luminescens</i> , plu3199)	88/95	177	7e-22
	<u>tktA</u> (+) -Transketolase (<i>P. luminescens</i> , plu0946)	100/100	213	3e-34
	<u>xpsD</u> (+) -Peptide synthetase (<i>Xenorhabdus bovienii</i> , AF455810)	53/73	203	4e-18
	<u>yncA</u> (+) -Probable GCN5-related N-acetyltransferase (<i>P. luminescens</i> , plu4503)	76/84	147	1e-13
	<u>yncB</u> (+) -Probable Zn-dependent oxidoreductase (<i>Escherichia coli</i> , EFER_3231; <i>P. luminescens</i> , plu4072)	77/91	159	8e-18
	<u>aroG</u> (-) -3-deoxy-D-arabino-heptulosonate 7-phosphate synthetase (<i>P. luminescens</i> , plu1470)	86/90	150	3e-16
	<u>carB</u> (-) -Carbamoylphosphate synthetase (<i>P. luminescens</i> , plu0604)	96/98	194	5e-34

	<i>cbiA</i> (-) -Cobyrinic acid a,c-diamide synthase (<i>P. luminescens</i> , plu2999)	98/100	177	5e-28
	<i>cbiH</i> (-) -Precorrin-3 methyltransferase (<i>P. luminescens</i> ; plu2991)	90/93	233	5e-32
	<i>cdd</i> (-) -Cytidine deaminase (<i>Lysinibacillus sphaericus</i> , Bsph_0353)	64/73	130	5e-09
	<i>clpA</i> (-) -ATP-dependent Clp protease (<i>P. luminescens</i> , plu1594)	85/94	161	2e-22
	<i>cpdB</i> -2',3'-cyclic-nucleotide 2'-phosphodiesterase precursor (<i>P. luminescens</i> , plu3927)	87/91	146	2e-19
	<i>elbB</i> (-) -Enhancing lycopene biosynthesis protein 2 (SCRP-27A) (<i>P. luminescens</i> , plu4007)	96/98	162	7e-30
	<i>galE</i> (-) -UDP-glucose 4-epimerase (<i>P. luminescens</i> , plu4831)	85/91	151	5e-27
	<i>glpD</i> (-) -Aerobic glycerol-3-phosphate dehydrogenase (<i>P. luminescens</i> , plu0194)	64/75	156	1e-10
	<i>gltA</i> (-) -Citrate synthase (<i>Photorhabdus asymbiotica</i> , FM211057; <i>P. luminescens</i> , plu1425)	92/94	116	9e-18
	<i>hslIV</i> (-) -ABC type protease (<i>P. luminescens</i> , plu4762)	95/95	144	1e-26
	<i>iolC</i> (-) -Putative myo-inositol carbohydrate kinase (<i>P. luminescens</i> , plu1801)	88/94	229	2e-37
	<i>iolD</i> (-) -Putative thiamine pyrophosphate-dependent myo-inositol carbohydrate kinase (<i>P. luminescens</i> , plu1805)	90/90	146	1e-26
	<i>menD</i> (-) -Menaquinone biosynthesis protein (<i>P. luminescens</i> , plu3073)	70/87	222	1e-24
	<i>mrsA</i> (-) -Phosphoglucomutase protein (<i>P. luminescens</i> , plu4533)	96/100	173	5e-30
	<i>phbC</i> (-) -Isochorismate synthase PhbC (<i>P. luminescens</i> , AY042783)	85/92	161	2e-24
	<i>phbF</i> (-) -Photobactin synthetase (<i>P. luminescens</i> , AY042783)	100/100	159	2e-24
	<i>phbH</i> (-) -Photobactin synthetase PhbH (<i>P. luminescens</i> , AY042783)	88/91	203	3e-35
	<i>queF</i> (-) -NADPH-dependent 7-cyano-7-deazaguanine reductase (<i>Erwinia tasmaniensis</i> , ETA_27310; <i>P. luminescens</i> , plu0662)	68/73	136	1e-09
Unknown	(+) - <u>Hypothetical protein</u> (<i>P. luminescens</i> , plu0801)	87/90	93	1e-6
	(+) -Hypothetical protein (<i>P. luminescens</i> , plu0830)	95/97	180	9e-25
	(+) -Hypothetical protein (<i>P. luminescens</i> , plu1160)	97/100	90	3e-8
	(+) - <u>Hypothetical protein</u> (<i>P. luminescens</i> , plu1774)	95/95	114	2e-11
	(+) - <u>Hypothetical protein</u> (<i>P. luminescens</i> , plu2035)	81/98	129	1e-13

(+) - <u>Unknown sequence flanked by plu3378 and plu3379</u> (<i>P. luminescens</i>)	96/96	159	1e-26
(+) -Hypothetical protein (<i>P. luminescens</i> , plu3387)	93/97	174	2e-25
(+) -No similarity to known genes			
(-) - <u>Hypothetical protein</u> (<i>P. luminescens</i> , plu0428)	77/87	177	2e-26
(-) -Hypothetical protein (<i>P. luminescens</i> , plu1582)	75/78	227	1e-22
(-) -Hypothetical protein (<i>P. luminescens</i> , plu1927)	76/86	139	1e-18
(-) - <u>Hypothetical protein</u> (<i>P. luminescens</i> , plu2339)	84/89	129	6e-14
(-) -Hypothetical protein (<i>P. luminescens</i> , plu3186)	86/93	224	1e-07
(-) -Hypothetical protein (<i>P. luminescens</i> , plu4553)	87/94	174	1e-23
(-) -No similarity to known genes (3+4)			

Note: Up-regulation and down-regulation of genes are indicated by (+) and (-), respectively. Genes underlined were also differentially regulated in response to *in vitro* stationary-phase starvation conditions.