

Supplementary Material

Table S1 - Transcript levels analysis of the *Synechocystis* sp. PCC 6803 transcriptional units (TU) harboring genes encoding SLH/OprB-domains outer membrane proteins under 10 different environmental conditions, as determined by [18].

TU ID	TU start	TU end	Strand	5'UTR	genes	15 °C	42 °C	-CO ₂	Dark	-Fe	HL	-N	-P	Exp. p.	Stat. p.	Max reads	Average	Max/Avg	Sense tags
TU971	958084	960116	+	53	1	40362	45295	38272	9363	45113	95667	82402	66762	49195	29046	95667	50147,7	1,91	slr1841
TU599	610937	614020	+	120	3	21331	15443	7420	243	42214	53026	11858	43046	22829	4413	53026	22182,3	2,39	slr1908 , <i>slr1909</i> , <i>slr1910</i>
TU1141	1116114	1111170	-	93	4	1678	0	58	0	214	259	2823	0	13761	180	13761	1897,3	7,25	<i>slr1270</i> , slr1271 , <i>ssl2507</i> , <i>slr1272</i>
																			slr0772
TU3332	3168888	3176441	+	166	5	30343	1201	345174	2673	5711	1005917	5985	26025	207607	180	1005917	163081,6	6,17	<i>slr0040</i> , <i>slr0041</i> , slr0042 , <i>slr0043</i> , <i>slr0044</i>
TU3630	3456162	3454008	-	106	1	0	33	19	0	1382	199	75	39	210	45	1382	200,2	6,9	slr1550

In bold are highlighted the genes encoding SLH/OprB-domains outer membrane proteins studied in this work.

Table S2. Oligonucleotides used in this work.

Oligo	Application	Sequence (5' to 3')	Product size (bp)	Restriction Enzyme	T _a (°C)
<i>slr1841</i> 5'F	<i>slr1841</i> 5' recombination platform	Aaa <u>ctcgag</u> agtcctgttagtgagccct	651	XhoI	63
<i>slr1841</i> 5'R		Aaactgcagcgagacgagtgaccaacagg		PstI	
<i>slr1841</i> 3'F	<i>slr1841</i> 3' recombination platform	Aaactgcagtggttactggctagcacg	663	PstI	63
<i>slr1841</i> 3'R		Aaaggatccgcagagggttagcagtggtt		BamHI	
<i>slr1908</i> 5'F	<i>slr1908</i> 5' recombination platform	Aaa <u>ctcgag</u> agtcacaggtgaattggcc	580	XhoI	63
<i>slr1908</i> 5'R		Aaactgcaggcgccgaagtgtcaatgtt		PstI	
<i>slr1908</i> 3'F	<i>slr1908</i> 3' recombination platform	Aaactgcagctggattggcggtactggtt	668	PstI	63
<i>slr1908</i> 3'R		Aaaggatccaggggcatcaaacaccactc		BamHI	
<i>slr0042</i> 5'F	<i>slr0042</i> 5' recombination platform	Aaa <u>ctcgag</u> gtgacatcggttcggagtt	647	XhoI	63
<i>slr0042</i> 5'R		Aaactgcagggttgagatttggggatt		PstI	
<i>slr0042</i> 3'F	<i>slr0042</i> 3' recombination platform	Aaactgcaggcctaacgatgtgtcgatt	629	BamHI	63
<i>slr0042</i> 3'R		Aaaggatcctagagtcgcctccggatta		PstI	
<i>slI1550</i> 5'F	<i>slI1550</i> 5' recombination platform	Aaa <u>ctcgag</u> gggacagatcactccgtgt	566	XhoI	63
<i>slI1550</i> 5'R		Aaactgcagacactggctggaaagtaccg		PstI	
<i>slI1550</i> 3'F	<i>slI1550</i> 3' recombination platform	Aaactgcagaccogtagcccgatctattt	581	PstI	63
<i>slI1550</i> 3'R		Aaaggatcctcaatgtcagtggtgcaat		BamHI	
<i>slI0772</i> 5'F	<i>slI0772</i> 5' recombination platform	Aaa <u>ctcgag</u> ggcaatggcgtaatacaagt	689	XhoI	63
<i>slI0772</i> 5'R		Aaactgcagacagtacccaagcgagagt		PstI	
<i>slI0772</i> 3'F	<i>slI0772</i> 3' recombination platform	Aaactgcagagctggcttaattggcaga	636	PstI	63
<i>slI0772</i> 3'R		Aaaggatccttaagcacgacccaaaaacc		BamHI	
<i>slI1271</i> 5'F	<i>slI1271</i> 5' recombination platform	Aaa <u>ctcgag</u> aacgacaatgccaaaacctc	648	XhoI	63
<i>slI1271</i> 5'R		Aaactgcaggcgcgcaagttaaaatcag		PstI	
<i>slI1271</i> 3'F	<i>slI1271</i> 3' recombination platform	Aaactgcagatcgccccatttattacc	574	PstI	63
<i>slI1271</i> 3'R		Aaaggatcccgggtgtagcgggagtaata		BamHI	
pUC 4K F	Kanamycin resistance cassette	aaactgcagtgaggtctgcctcgtaagaa	1226	PstI	64
pUC 4K R		aaactgcagaaagccacgttgtgtctcaaa		PstI	

The pair of oligonucleotide used for the amplification of the kanamycin resistance cassette was taken from [29].

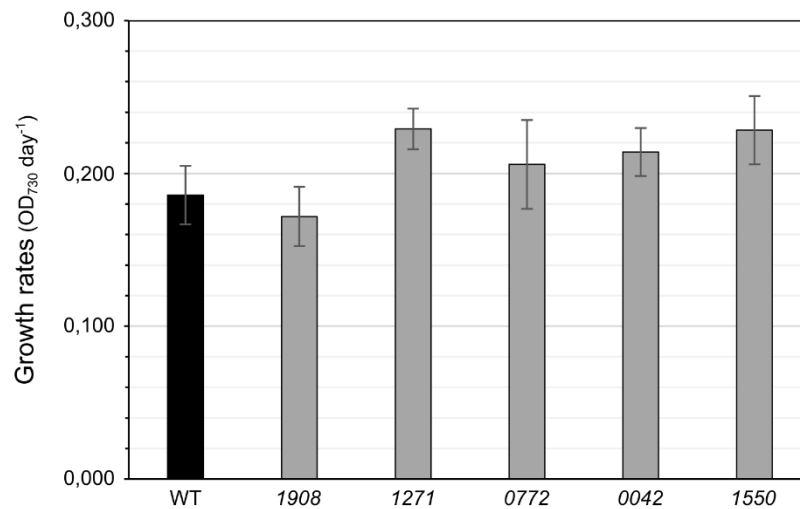


Figure S1. *Synechocystis* sp. PCC 6803 disruption mutants' growth rates determined in cultures grown under standard conditions. *Synechocystis* cultures of the wild-type (WT) and mutant strains *slr1908* (1908), *slr1271* (1271), *slr0772* (0772), *slr0042* (0042) and *slr1550* (1550) were grown in BG11 liquid medium, in 96-well clear bottomed microplates at 30 °C with a 16 h light (50 $\mu\text{mol photons m}^{-2} \text{s}^{-1}$) / 8 h dark cycle regime, with agitation, for 4 days. Every day, cell cultures were suspended and their optical density (OD₇₃₀) measured on a microplate reader. Growth rates were determined between the first and fourth day of cultivation. Error bars represent the standard deviation of three independent biological replicates.