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421 Table SI. Oligonucleotide sequences of primers used in this study

Primer pair	Target gene	Sequence 5'-3'	Reference	Amplicon size (bp)
SYN172F ^(a)	<i>16S</i>	AATACCCCATATGCCGMGAG	[28]	1128
OXY1313R ^(a)	<i>rRNA</i>	CTTCACGTAGGCGAGTTGCAGC		
1F ^(b)	<i>ntcA</i>	AT(CAT)TT(TC)TT(TC)CC(GATC)GG(GATC)GA(TC)CC(GATC)GC	[29]	449
4R ^(b)		AT(GATC)GC(TC)TC(GATC)GC(AGT)AT(GATC)GC(TC)TG(AG)T		
358fGC ^(c)	<i>16S</i>	CGCCCGCCGCGCCCCGCGCCCGTCCCGCCGCCCCCGCC	[30]	604
	<i>rRNA</i>	CGCCTACGGGAGGCAGCAG		
907r ^(c)		CCGTCAATTCCTTTGAGTTT		
358f	<i>16S</i>	CCTACGGGAGGCAGCAG	[30]	564
907r	<i>rRNA</i>	CCGTCAATTCCTTTGAGTTT		

422 ^(a) Primer pair that amplifies all sequences from *Synechococcus* sub-clusters 5.1 (clades I–
 423 X), some of sub-cluster 5.2, all of LL *Prochlorococcus*, some of HLI *Prochlorococcus*, but
 424 does not amplify sequences from freshwater *Synechococcus* and from HLII
 425 *Prochlorococcus* strains [8, 28].

426 ^(b) Primer pair used for amplifying conserved regions of *ntcA* genes, typical from
 427 cyanobacteria

428 ^(c) Universal primers for bacteria used in DGGE experiments for nested-PCR.

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