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Supplementary Information for:

The cyanobacterium *Prochlorococcus* has divergent light-harvesting antennae and may have evolved in a low-oxygen ocean

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Supplementary Information Text

Metagenomic and metatranscriptomic sequence analysis: The metagenomic and metatranscriptomic sequence datasets associated with AMZ ecosystems (**Table S5**) were downloaded from the National Center for Biotechnology Information Sequence Read Archive (NCBI SRA) and the European Nucleotide Archive (ENA). For metagenomic recruitment, SAG assemblies (contigs FASTA files) were combined by using “minimus2” (1) to collapse and extend contigs with an overlap of ≥ 200 bp at 95% identity. Raw metagenomic sequences (**Table S5**) were quality filtered using Trimmomatic (2) v0.35 with the settings ILLUMINACLIP:adapters/TruSeq3-PE.fa:2:3:10 LEADING:3 TRAILING:3 SLIDINGWINDOW:4:15 MINLEN:36. Illumina paired-end reads were united using FLASH with default settings (3). The metagenomic quality-filtered reads were recruited (**Fig. S7**) using FR-HIT (4) with the following parameters: report recruitments with $>95\%$ identity to SAG (-c 95), coverage of $>70\%$ of the read (-m 70), ignore <70 bp reads (-l 70), maximum E-value of $1E-5$ (-e 0.00001), and reporting only the top 10 hits for each read (-r 10). Considering the comparatively low completeness of the *Prochlorococcus* SAGs, the AMZ I, AMZ II and AMZ III co-assemblies were used as references instead. A python script available on GitHub at https://github.com/cmorganl/MeatLoaf/blob/master/fr_hit_filter_recruitment_summary.py was used to calculate normalized abundance metrics from the FR-HIT outputs, including fragments per million mappable reads per kilobase (FPKM) (**Fig. S7**). As an additional quality control measure, if less than 50% of a genome's

bases recruited reads from a metagenome, the script would set the genome's abundance to zero.

For the metatranscriptomic analysis, the raw paired-end sequences from each dataset were assembled with the VSEARCH software (5) and converted to the FASTA format using stringent quality filter parameters (maxee=0.5). The resulting FASTA files were then aligned with the AMZ SAG contig sequences (> 1000 bp) and the complete genome sequences associated with *Prochlorococcus* and *Synechococcus* in the NCBI Genbank database using NCBI BLAST software (algorithm blastn), with a cutoff nucleotide identity of 95% over a minimum alignment length of 50 nucleotides and a bitscore cutoff of 50. The plot in **Fig. S8** expresses the presence (color) and absence (white) of key transcriptomic sequences related to chlorophyll biosynthesis and photosynthesis in the AMZ-associated metatranscriptomes, grouped by geographic region.

SI References

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4. B. Niu, Z. Zhu, L. Fu, S. Wu, W. Li, FR-HIT, a very fast program to recruit metagenomic reads to homologous reference genomes. *Bioinformatics* **27**, 1704–1705 (2011).
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Supplementary Figures

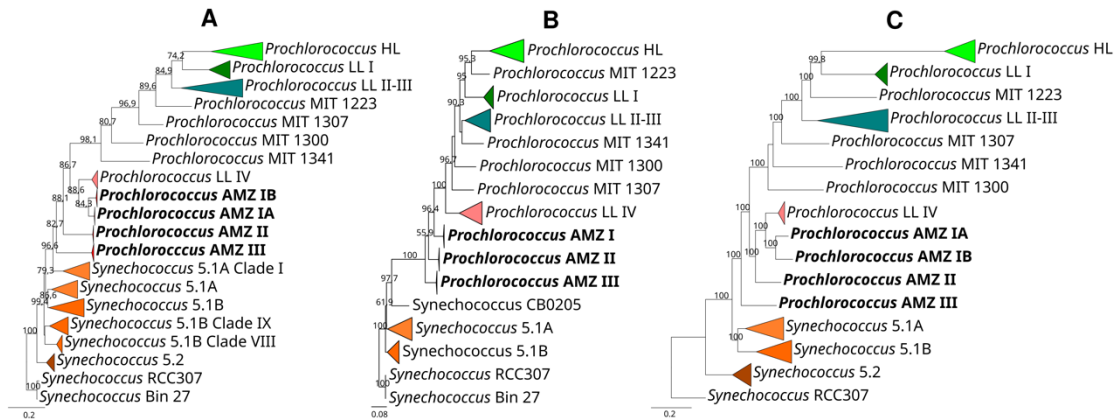


Fig. S1. Maximum-likelihood phylogenies of *Prochlorococcus* and marine *Synechococcus* based on single marker genes and multiple concatenated marker genes. ML topology shown with SH-like approximate likelihood ratio support values ($n=1000$ iterations) given at each node (values $>50\%$ are shown). Best-fit models were GTR+F+I+G4, SYM+R4, and LG+I+G4, respectively. Each collapsed clade/ecotype is denoted in colored triangles. **(A)** Phylogenetic tree based on the *petB* gene, encoding a component of the cytochrome b_6f complex; **(B)** Phylogenetic tree based on the *rbcL* gene, encoding the RuBisCO large subunit; **(C)** Phylogenomic tree based on 137 concatenated amino-acid sequences of single-copy genes. Trees were rooted in *Synechococcus* sub-cluster 5.3 representatives.

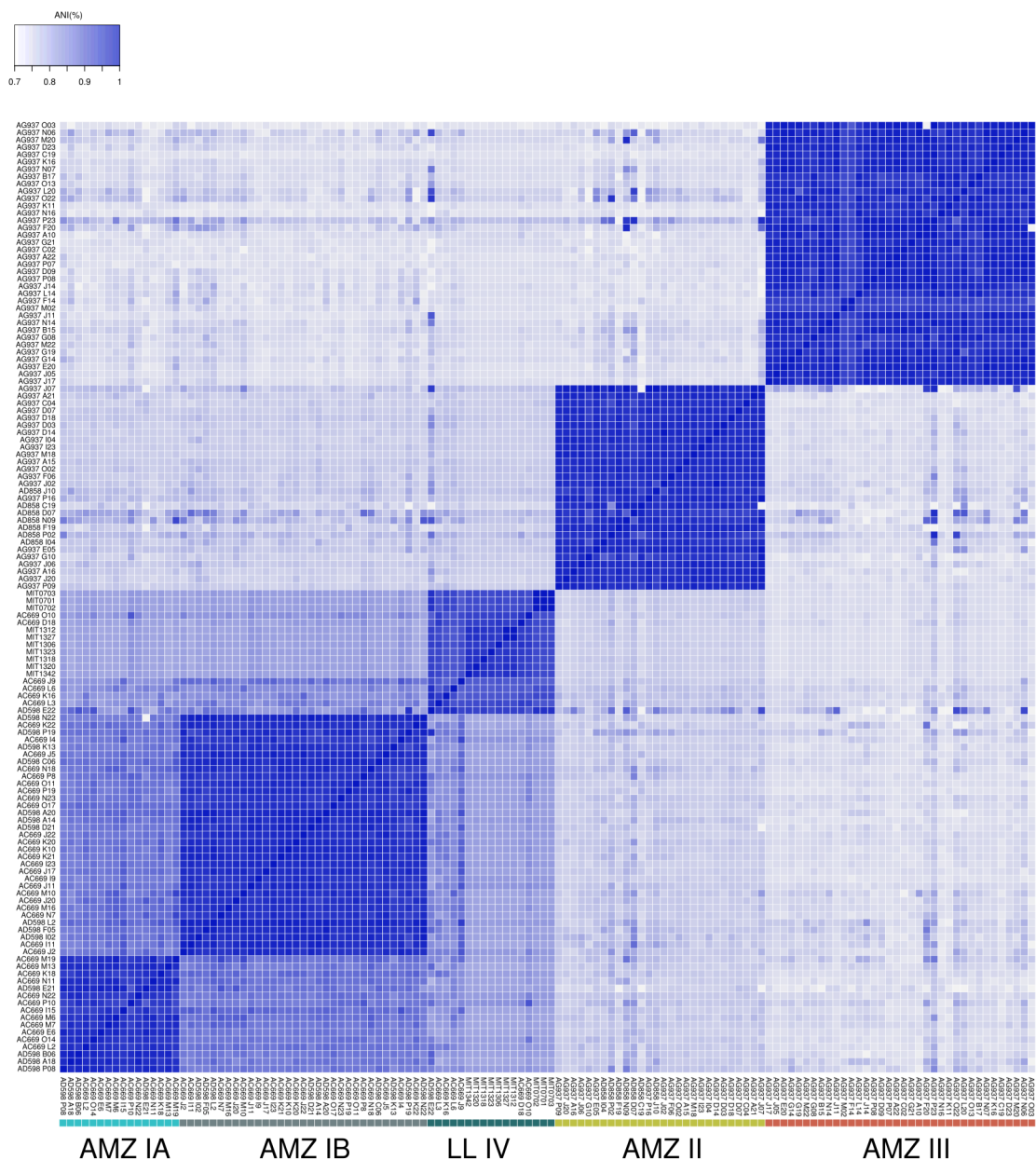


Fig. S2. Average Nucleotide Identity (ANI) of AMZ SAGs and complete genomes of *Prochlorococcus* LL IV. FastANI values between 0.7 and 1 are shown in the heatmap.

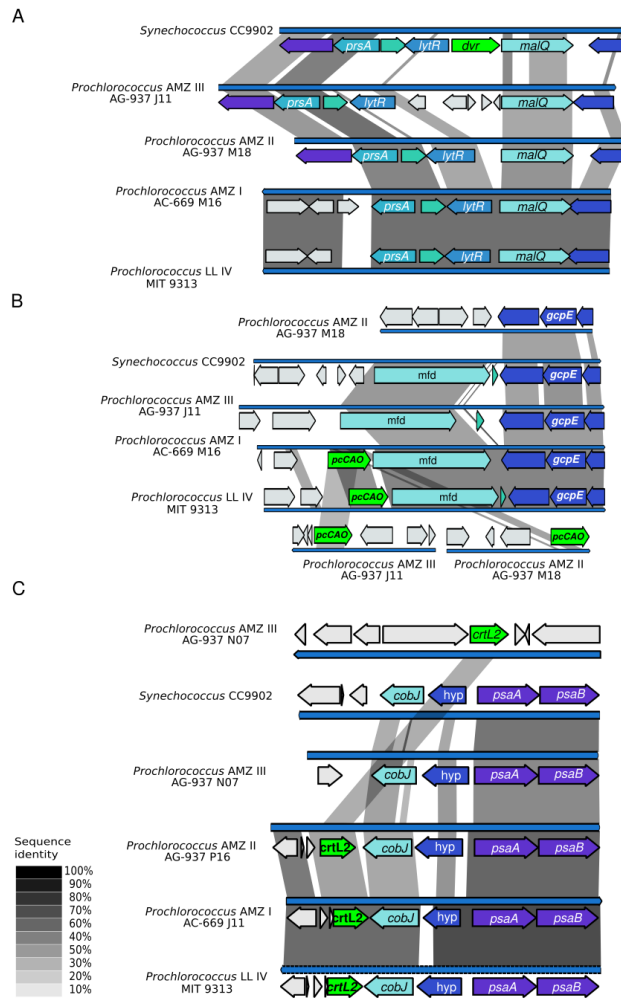


Fig. S3. Genome synteny between AMZ *Prochlorococcus* lineages and a marine *Synechococcus* reference genome showing the presence–absence of the *dvr*, *pcCAO* and *crtL2* genes. Grey lines between strains correspond to the sequence identity percentage according to blastn (bitscore >50). Only genes encoding functional proteins are denoted. **(A)** *dvr* gene context: *prsA*: ribose-phosphate pyrophosphokinase. *lytR*: Transcriptional attenuator LytR family; *dvr*: divinylchlorophyllide 8-vinylreductase; *malQ*: 4-alpha-glucanotransferase. **(B)** *pcCAO* gene context: *pcCAO*: *Prochlorococcus* chlorophyllide *a* oxygenase; *mtf*: Transcription repair coupling factor; *gcpE*: 1-hydroxy-2-methyl-2-(E)-butenyl 4-diphosphate synthase. **(C)** *crtL2* gene context: *crtL2*: lycopene epsilon cyclase; *cobJ*: Precorrin-3B C17-methyltransferase; *psaA*: Photosystem I P700 chlorophyll *a* apoprotein A1; *psaB*: Photosystem I P700 chlorophyll *a* apoprotein A2; *hyp*: hypothetical protein.

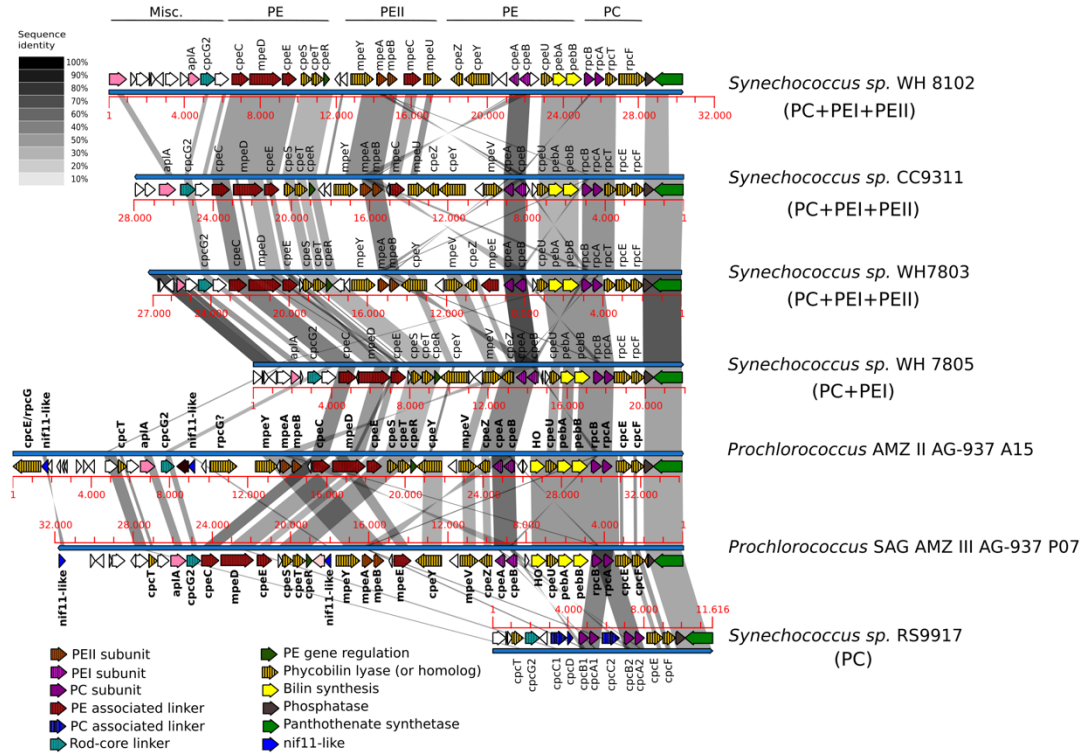


Fig. S4. Genome synteny of the phycobilisome rod gene region between *Prochlorococcus* AMZ II and AMZ III SAGs and selected marine *Synechococcus* reference genomes. Genes encoding the different subunits are marked in the upper part of the figure. Misc: Miscellaneous; PE-I: Phycoerythrin I; PE-II: Phycoerythrin II; PC: Phycocyanin.

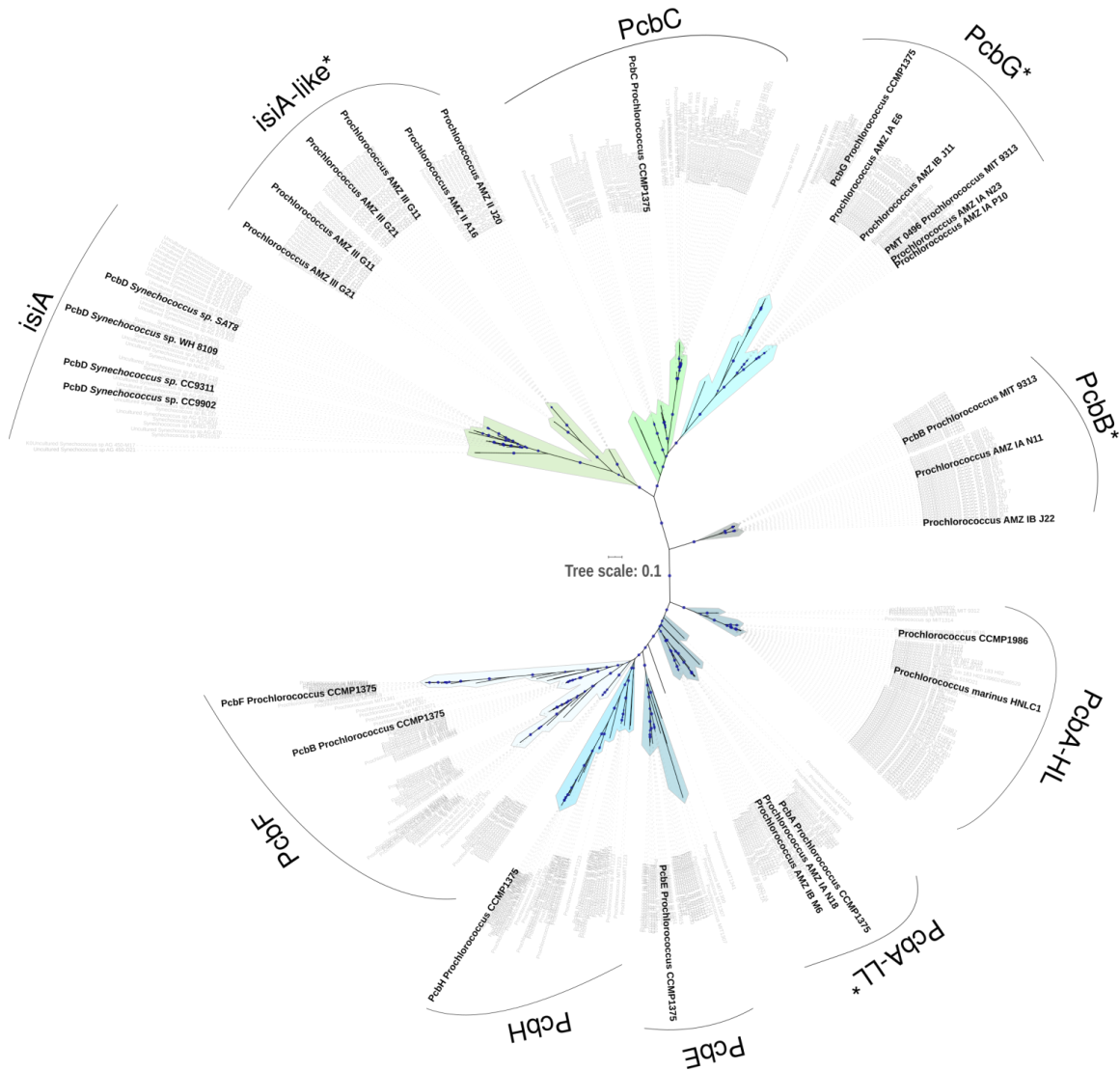
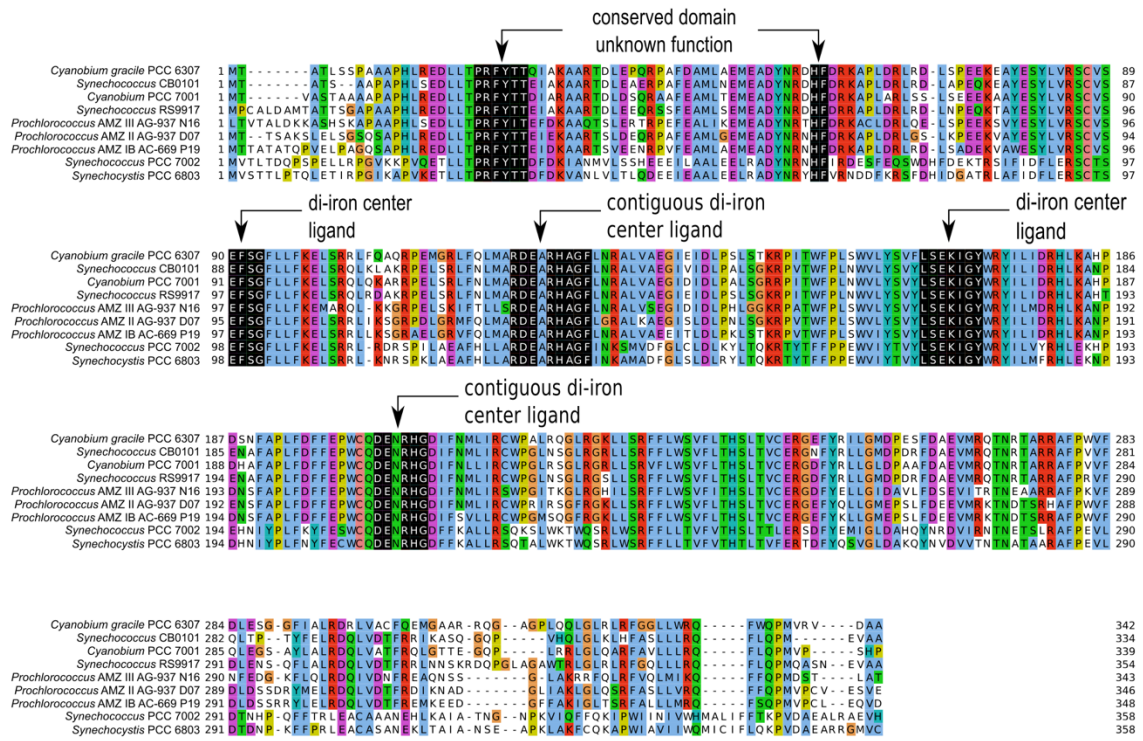


Fig. S5. Unrooted maximum-likelihood phylogenetic tree of chlorophyll *a/b* binding light-harvesting proteins (Pcbs) in *Prochlorococcus* and marine *Synechococcus*. Circles show branch support values >50% (n=1000 iterations) at each node. Best-fit model was LG+I+G4. Each *pcb* variant is denoted in colored branches. KEGG orthology for each *pcb* variant of *Prochlorococcus* CCMP1375 and MIT9313 (highlighted in bold) were used for the detection of the variants in all the genomes analyzed. *Prochlorococcus* AMZ SAGs *pcb* variants are marked with asterisks.

A - AcsF₂



C - HemN₂

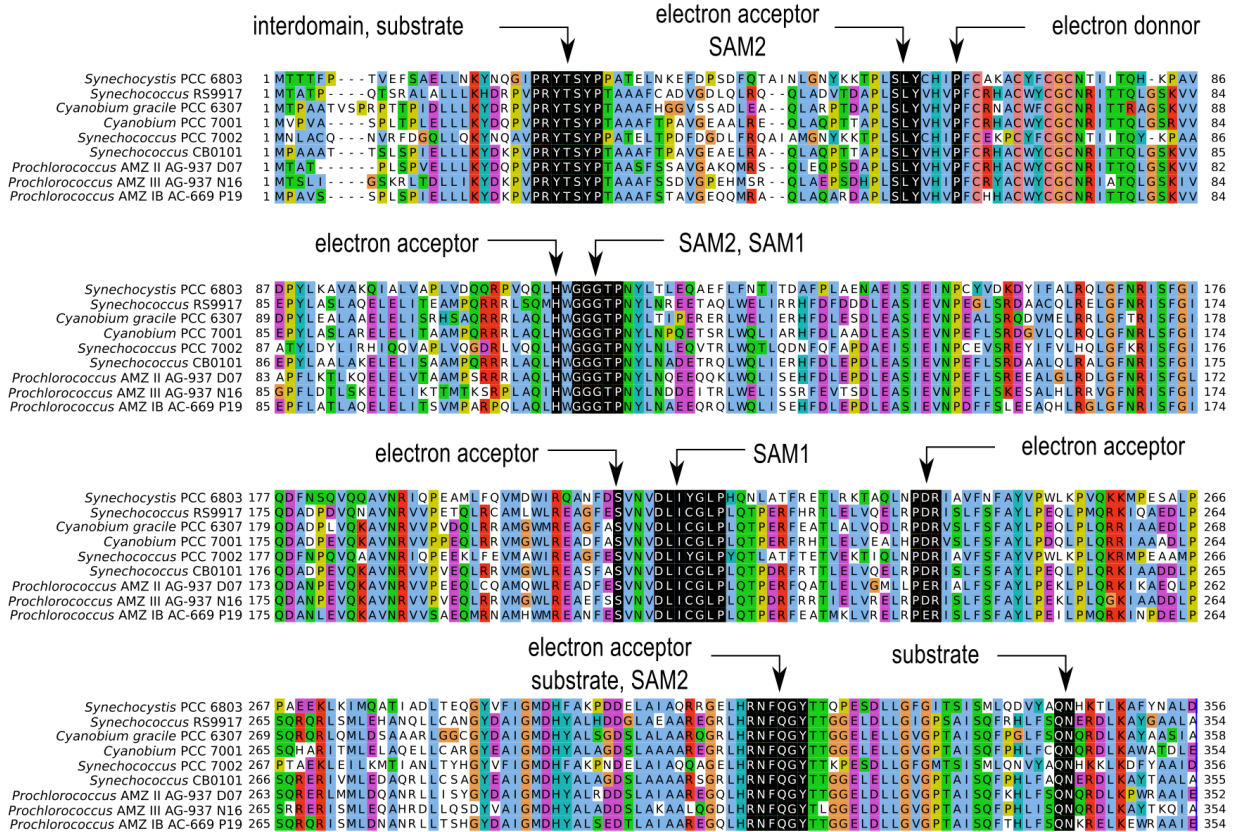


Fig. S6. Conserved residues in AcsF₂, HO₂, and HemN₂. Amino acid sequences of (A) AcsF₂, (B) HO₂, and (C) HemN₂ in AMZ SAGs and cyanobacteria appearing in Fig. 3.

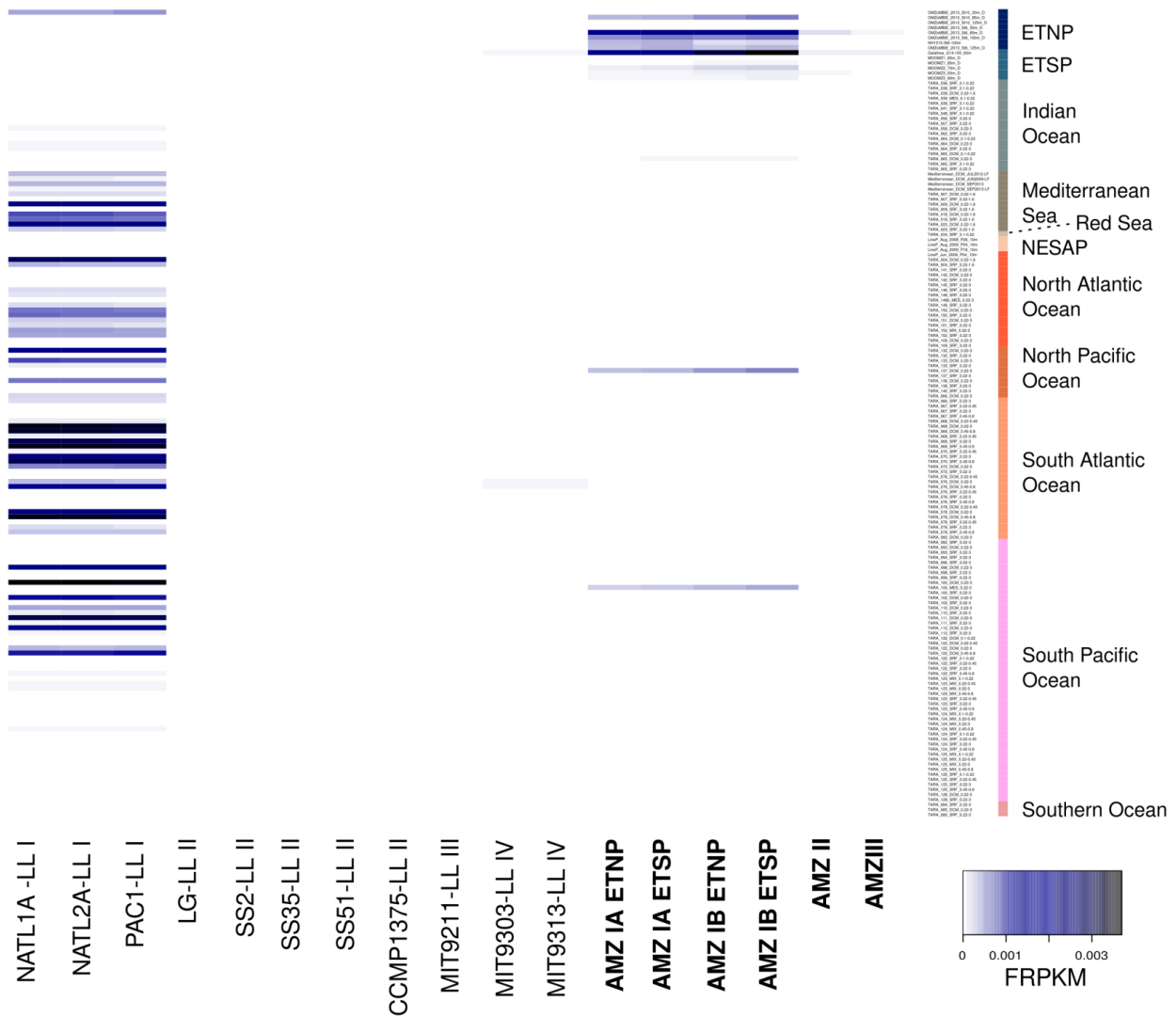


Fig. S7. Fragment recruitment of publicly available pelagic, upper ocean, microbial metagenomes onto AMZ SAG co-assemblies and *Prochlorococcus* LL genomes. AMZ *Prochlorococcus* ecotypes were only recruited by metagenomic fragments from oxygen-depleted waters. Co-assemblies of AMZ I SAGs dominated such recruitments. Values correspond to the fragments per kilobase per million (FRPKM) mappable reads. This is similar to reads per kilobase per million (RPKM), but each forward-reverse mate-pair is counted only once.

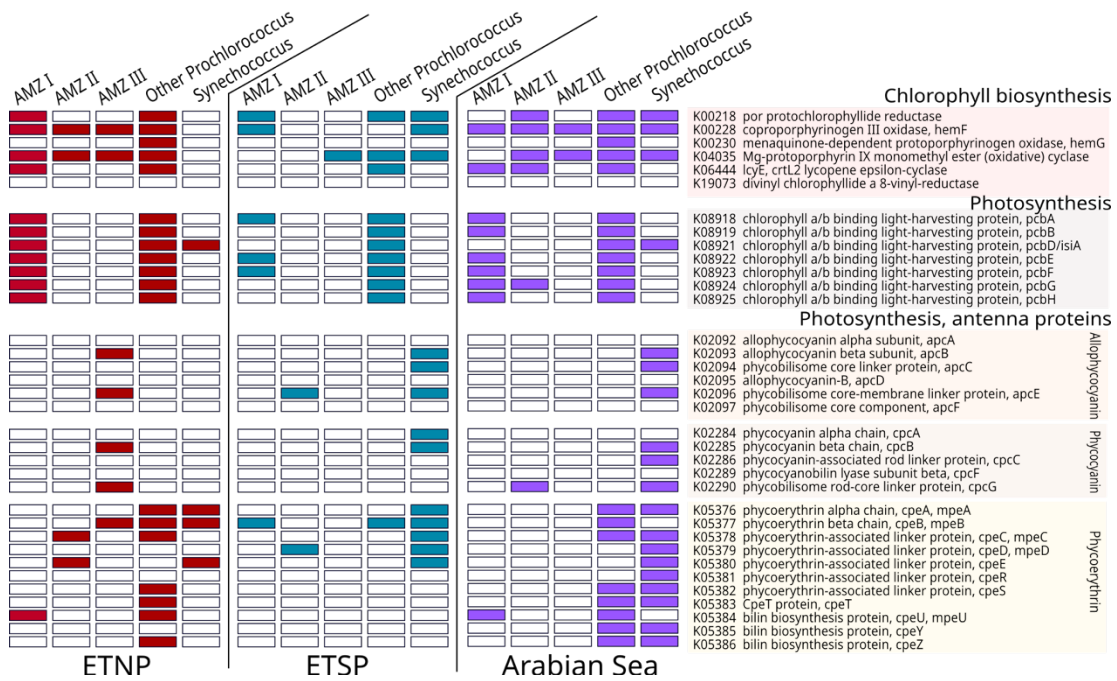


Fig. S8. Recruitment of transcripts encoding pigment biosynthesis and photosynthetic proteins from AMZ public metatranscriptomes. The plot shows the presence (color) - absence (white) of transcripts with assigned KEGG orthology related to chlorophyll biosynthesis and photosynthesis, grouped by geographic region (ETNP = eastern tropical North Pacific; ETSP = eastern tropical South Pacific).

Supplementary Tables

Table S1. Statistics and general information for individual AMZ SAGs, combined assemblies, and genomes used in this study.

<i>Prochlorococcus</i> AMZ SAGs	Clade / Ecotype	Sub- clade*	Accession number / GI	Isolation Site	Assembled Sequence Size (bp)	GC Content (%)	Num Genes	Genome Status	NCBI Taxonomy ID	CheckM completeness (%)	CheckM contamination (%)	Included in Co-assembly (name)
<i>Prochlorococcus</i> SCGC AC-669_E6	AMZ I	A	2626541501	Eastern Tropical South Pacific AMZ, 53m	1317901	48	1709	SAG	159733	39.26	0.00	
<i>Prochlorococcus</i> SCGC AC-669_I11	AMZ I	B	2626541503	Eastern Tropical South Pacific AMZ, 53m	919561	48	1261	SAG	159733	18.97	1.72	
<i>Prochlorococcus</i> SCGC AC-669_I15	AMZ I	A	2626541504	Eastern Tropical South Pacific AMZ, 53m	1485336	47	1852	SAG	159733	48.07	1.72	AMZ I-A-ETSP
<i>Prochlorococcus</i> SCGC AC-669_I23	AMZ I	B	2626541505	Eastern Tropical South Pacific AMZ, 53m	1656299	49	2427	SAG	159733	33.62	3.45	
<i>Prochlorococcus</i> SCGC AC-669_I4	AMZ I	B	2626541506	Eastern Tropical South Pacific AMZ, 53m	840753	49	1425	SAG	159733	20.69	1.72	
<i>Prochlorococcus</i> SCGC AC-669_I9	AMZ I	B	2626541507	Eastern Tropical South Pacific AMZ, 53m	1964467	49	2686	SAG	159733	57.07	4.60	
<i>Prochlorococcus</i> SCGC AC-669_J11	AMZ I	B	2626541509	Eastern Tropical South Pacific AMZ, 53m	1447579	50	2228	SAG	159733	31.84	2.58	
<i>Prochlorococcus</i> SCGC AC-669_J17	AMZ I	B	2626541510	Eastern Tropical South Pacific AMZ, 53m	1027724	49	1446	SAG	159733	31.03	1.72	
<i>Prochlorococcus</i> SCGC AC-669_J2	AMZ I	B	2626541513	Eastern Tropical South Pacific AMZ, 53m	748417	49	1351	SAG	159733	28.10	1.72	
<i>Prochlorococcus</i> SCGC AC-669_J20	AMZ I	B	2626541511	Eastern Tropical South Pacific AMZ, 53m	1233135	49	1985	SAG	159733	32.76	0.00	
<i>Prochlorococcus</i> SCGC AC-669_J22	AMZ I	B	2626541512	Eastern Tropical South Pacific AMZ, 53m	1826776	49	2523	SAG	159733	58.79	4.89	AMZ I-B-ETSP
<i>Prochlorococcus</i> SCGC AC-669_J5	AMZ I	B	2626541514	Eastern Tropical South Pacific AMZ, 53m	1359317	49	1796	SAG	159733	27.59	5.17	
<i>Prochlorococcus</i> SCGC AC-669_K10	AMZ I	B	2626541515	Eastern Tropical South Pacific AMZ, 53m	1175560	48	1723	SAG	159733	39.66	3.45	
<i>Prochlorococcus</i> SCGC AC-669_K18	AMZ I	A	2626541516	Eastern Tropical South Pacific AMZ, 53m	1028957	48	1464	SAG	159733	26.18	2.85	
<i>Prochlorococcus</i> SCGC AC-669_K20	AMZ I	B	2626541517	Eastern Tropical South Pacific AMZ, 53m	1706781	49	2490	SAG	159733	51.09	2.17	AMZ I-B-ETSP
<i>Prochlorococcus</i> SCGC AC-669_K21	AMZ I	B	2626541518	Eastern Tropical South Pacific AMZ, 53m	1597402	48	1953	SAG	159733	44.83	3.45	
<i>Prochlorococcus</i> SCGC AC-669_K22	AMZ I	B	2626541519	Eastern Tropical South Pacific AMZ, 53m	560625	48	891	SAG	159733	0.00	0.00	
<i>Prochlorococcus</i> SCGC AC-669_L2	AMZ I	A	2626541520	Eastern Tropical South Pacific AMZ, 53m	1111251	49	1669	SAG	159733	33.97	2.17	
<i>Prochlorococcus</i> SCGC AC-669_M10	AMZ I	B	2626541521	Eastern Tropical South Pacific AMZ, 53m	677609	47	889	SAG	159733	19.86	0.68	
<i>Prochlorococcus</i> SCGC AC-669_M13	AMZ I	A	2626541522	Eastern Tropical South Pacific AMZ, 53m	1019308	48	1382	SAG	159733	37.93	2.59	
<i>Prochlorococcus</i> SCGC AC-669_M16	AMZ I	B	2626541523	Eastern Tropical South Pacific AMZ, 53m	1336608	49	2014	SAG	159733	40.28	6.90	
<i>Prochlorococcus</i> SCGC AC-669_M19	AMZ I	A	2626541524	Eastern Tropical South Pacific AMZ, 53m	440044	48	744	SAG	159733	13.79	1.72	

Prochlorococcus SCGC AC-669_M6	AMZ I	A	2626541525	Eastern Tropical South Pacific AMZ, 53m	1179216	48	1481	SAG	159733	33.62	2.87	
Prochlorococcus SCGC AC-669_M7	AMZ I	A	2626541526	Eastern Tropical South Pacific AMZ, 53m	1512787	49	2280	SAG	159733	43.59	4.21	AMZ I-A-ETSP
Prochlorococcus SCGC AC-669_N11	AMZ I	A	2626541527	Eastern Tropical South Pacific AMZ, 53m	884928	49	1259	SAG	159733	32.84	2.67	
Prochlorococcus SCGC AC-669_N18	AMZ I	B	2626541528	Eastern Tropical South Pacific AMZ, 53m	1055396	48	1364	SAG	159733	34.14	1.37	
Prochlorococcus SCGC AC-669_N22	AMZ I	A	2626541529	Eastern Tropical South Pacific AMZ, 53m	1531124	49	2569	SAG	159733	29.17	4.21	
Prochlorococcus SCGC AC-669_N23	AMZ I	B	2626541530	Eastern Tropical South Pacific AMZ, 53m	1458221	49	2492	SAG	159733	36.54	4.44	
Prochlorococcus SCGC AC-669_N7	AMZ I	B	2626541531	Eastern Tropical South Pacific AMZ, 53m	1227375	49	1908	SAG	159733	35.24	4.81	
Prochlorococcus SCGC AC-669_O11	AMZ I	B	2626541532	Eastern Tropical South Pacific AMZ, 53m	1671148	49	2032	SAG	159733	65.62	2.72	
Prochlorococcus SCGC AC-669_O14	AMZ I	A	2626541533	Eastern Tropical South Pacific AMZ, 53m	1338060	49	2192	SAG	159733	36.21	1.72	
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Prochlorococcus SCGC AC-669_P19	AMZ I	B	2626541536	Eastern Tropical South Pacific AMZ, 53m	1352791	50	2028	SAG	159733	43.81	2.17	AMZ I-B-ETSP
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Prochlorococcus SCGC AD-598_B06	AMZ I	A	2718217658	Eastern Tropical North Pacific AMZ, 100m	673389	49	760	SAG	159733	22.41	0.00	AMZ I-A-ETNP
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Prochlorococcus SCGC AG-937_M02	AMZ III	2818991513	Eastern Tropical North Pacific AMZ, 100m	978403	51	1022	SAG	159733	4.17	0.00	
Prochlorococcus SCGC AG-937_D23	AMZ III	2818991553	Eastern Tropical North Pacific AMZ, 100m	926146	53	944	SAG	159733	0.00	0.00	
Prochlorococcus SCGC AG-937_D03	AMZ II	2818991563	Eastern Tropical North Pacific AMZ, 100m	805161	51	886	SAG	159733	0.00	0.00	
Prochlorococcus SCGC AG-937_P16	AMZ II	2818991485	Eastern Tropical North Pacific AMZ, 100m	712242	51	786	SAG	159733	0.00	0.00	
Prochlorococcus SCGC AG-937_E20	AMZ III	2818991549	Eastern Tropical North Pacific AMZ, 100m	1102164	52	1175	SAG	159733	47.83	0.00	AMZ III
Prochlorococcus SCGC AG-937_P07	AMZ III	2818991488	Eastern Tropical North Pacific AMZ, 100m	935011	52	996	SAG	159733	47.01	0.54	AMZ III
Prochlorococcus SCGC AG-937_G14	AMZ III	2818991539	Eastern Tropical North Pacific AMZ, 100m	1093110	52	1129	SAG	159733	46.88	0.00	AMZ III
Prochlorococcus SCGC AG-937_G21	AMZ III	2818991535	Eastern Tropical North Pacific AMZ, 100m	852506	53	846	SAG	159733	41.21	0.27	
Prochlorococcus SCGC AG-937_E05	AMZ II	2818991551	Eastern Tropical North Pacific AMZ, 100m	578566	51	612	SAG	159733	37.93	1.72	
Prochlorococcus SCGC AG-937_M20	AMZ III	2818991510	Eastern Tropical North Pacific AMZ, 100m	989117	52	1089	SAG	159733	36.90	0.00	
Prochlorococcus SCGC AG-937_L14	AMZ III	2818991515	Eastern Tropical North Pacific AMZ, 100m	1156407	51	1174	SAG	159733	35.52	0.00	
Prochlorococcus SCGC AG-937_B17	AMZ III	2818991567	Eastern Tropical North Pacific AMZ, 100m	1102965	51	1165	SAG	159733	34.48	0.00	
Prochlorococcus SCGC AG-937_C02	AMZ III	2818991566	Eastern Tropical North Pacific AMZ, 100m	773291	53	813	SAG	159733	29.35	0.27	
Prochlorococcus SCGC AG-937_C19	AMZ III	2818991564	Eastern Tropical North Pacific AMZ, 100m	919758	52	947	SAG	159733	28.44	0.00	
Prochlorococcus SCGC AG-937_D09	AMZ III	2818991559	Eastern Tropical North Pacific AMZ, 100m	617600	54	646	SAG	159733	27.93	0.00	
Prochlorococcus SCGC AG-937_K23	AMZ III	2818991516	Eastern Tropical North Pacific AMZ, 100m	1247789	53	1250	SAG	159733	25.86	0.00	
Prochlorococcus SCGC AG-937_N14	AMZ III	2818991503	Eastern Tropical North Pacific AMZ, 100m	630178	53	597	SAG	159733	25.05	0.00	
Prochlorococcus SCGC AG-937_N16	AMZ III	2818991501	Eastern Tropical North Pacific AMZ, 100m	906323	52	960	SAG	159733	24.73	0.00	
Prochlorococcus SCGC AG-937_K11	AMZ III	2818991520	Eastern Tropical North Pacific AMZ, 100m	1087940	52	1100	SAG	159733	24.41	0.00	
Prochlorococcus SCGC AG-937_D11	AMZ III	2818991558	Eastern Tropical North Pacific AMZ, 100m	858034	50	861	SAG	159733	24.14	0.00	
Prochlorococcus SCGC AG-937_F14	AMZ III	2818991546	Eastern Tropical North Pacific AMZ, 100m	722449	52	775	SAG	159733	23.31	0.00	
Prochlorococcus SCGC AG-937_F20	AMZ III	2818991545	Eastern Tropical North Pacific AMZ, 100m	509342	54	558	SAG	159733	22.41	0.00	
Prochlorococcus SCGC AG-937_F21	AMZ III	2818991544	Eastern Tropical North Pacific AMZ, 100m	1442092	52	1453	SAG	159733	20.69	0.00	
Prochlorococcus SCGC AG-937_J06	AMZ II	2818991527	Eastern Tropical North Pacific AMZ, 100m	621910	50	662	SAG	159733	20.69	0.00	
Prochlorococcus SCGC AG-937_A04	AMZ III	2818991575	Eastern Tropical North Pacific AMZ, 100m	1306984	51	1420	SAG	159733	20.69	0.00	
Prochlorococcus SCGC AG-937_G19	AMZ III	2818991536	Eastern Tropical North Pacific AMZ, 100m	653852	54	632	SAG	159733	20.69	0.00	

Prochlorococcus SCGC AG-937_N15	AMZ III	2818991502	Eastern Tropical North Pacific AMZ, 100m	863565	53	920	SAG	159733	20.69	0.00
Prochlorococcus SCGC AG-937_P18	AMZ III	2818991483	Eastern Tropical North Pacific AMZ, 100m	909842	52	925	SAG	159733	19.43	0.00
Prochlorococcus SCGC AD-858-I04	AMZ II	2724679758	Eastern Tropical North Pacific AMZ, 100m	487413	49	514	SAG	159733	18.97	0.00
Prochlorococcus SCGC AG-937_M22	AMZ III	2818991509	Eastern Tropical North Pacific AMZ, 100m	939699	52	1020	SAG	159733	18.97	0.00
Prochlorococcus SCGC AG-937_J08	AMZ III	2818991525	Eastern Tropical North Pacific AMZ, 100m	461235	52	477	SAG	159733	18.97	0.00
Prochlorococcus SCGC AG-937_J14	AMZ III	2818991523	Eastern Tropical North Pacific AMZ, 100m	450359	53	506	SAG	159733	18.97	0.00
Prochlorococcus SCGC AG-937_G08	AMZ III	2818991542	Eastern Tropical North Pacific AMZ, 100m	803526	53	816	SAG	159733	18.97	0.00
Prochlorococcus SCGC AG-937_A22	AMZ III	2818991570	Eastern Tropical North Pacific AMZ, 100m	1052010	51	1133	SAG	159733	17.24	0.00
Prochlorococcus SCGC AG-937_B15	AMZ III	2818991568	Eastern Tropical North Pacific AMZ, 100m	897180	51	935	SAG	159733	17.24	0.00
Prochlorococcus SCGC AG-937_G11	AMZ III	2818991540	Eastern Tropical North Pacific AMZ, 100m	470938	51	432	SAG	159733	17.24	0.00
Prochlorococcus SCGC AD-858-N09	AMZ II	2724679773	Eastern Tropical North Pacific AMZ, 100m	197705	46	191	SAG	159733	17.24	0.00
Prochlorococcus SCGC AD-858-F19	AMZ II	2724679753	Eastern Tropical North Pacific AMZ, 100m	203942	48	222	SAG	159733	13.79	0.00
Prochlorococcus SCGC AG-937_G10	AMZ II	2818991541	Eastern Tropical North Pacific AMZ, 100m	251199	50	301	SAG	159733	13.36	0.00
Prochlorococcus SCGC AG-937_N06	AMZ III	2818991507	Eastern Tropical North Pacific AMZ, 100m	430794	51	496	SAG	159733	13.32	0.00
Prochlorococcus SCGC AG-937_O22	AMZ III	2818991490	Eastern Tropical North Pacific AMZ, 100m	221325	53	223	SAG	159733	12.07	0.00
Prochlorococcus SCGC AG-937_P23	AMZ III	2818991481	Eastern Tropical North Pacific AMZ, 100m	172363	53	207	SAG	159733	10.34	0.00
Prochlorococcus SCGC AD-858-D07	AMZ II	2724679692	Eastern Tropical North Pacific AMZ, 100m	240816	48	263	SAG	159733	10.34	0.00
Prochlorococcus SCGC AD-858-J10	AMZ II	2724679760	Eastern Tropical North Pacific AMZ, 100m	486624	47	519	SAG	159733	8.33	0.00
Prochlorococcus SCGC AG-937_P17	AMZ III	2818991484	Eastern Tropical North Pacific AMZ, 100m	823764	51	825	SAG	159733	5.17	0.00
Prochlorococcus SCGC AD-858-C19	AMZ II	2724679684	Eastern Tropical North Pacific AMZ, 100m	267436	44	299	SAG	159733	5.17	1.72
Prochlorococcus SCGC AD-858-P02	AMZ II	2724679775	Eastern Tropical North Pacific AMZ, 100m	338758	51	369	SAG	159733	4.48	0.00
Prochlorococcus SCGC AG-937_J07	AMZ II	2818991526	Eastern Tropical North Pacific AMZ, 100m	121156	51	140	SAG	159733	4.17	0.00
Prochlorococcus SCGC AG-937_L20	AMZ III	2818991514	Eastern Tropical North Pacific AMZ, 100m	426395	51	482	SAG	159733	0.00	0.00
Prochlorococcus SCGC AG-937_N04	AMZ III	2818991508	Eastern Tropical North Pacific AMZ, 100m	490658	53	536	SAG	159733	0.00	0.00
Prochlorococcus SCGC AG-937_O03	AMZ III	2818991497	Eastern Tropical North Pacific AMZ, 100m	171319	50	214	SAG	159733	0.00	0.00

<i>Prochlorococcus</i> AMZ SAG combined assemblies	Clade / Ecotype	Sub-clade*	Accession number / GI	Isolation Site	Assembled Sequence Size (bp)	GC Content (%)	Num Genes	Genome Status	NCBI Taxonomy ID	CheckM completeness (%)	CheckM contamination (%)	Comments
<i>Prochlorococcus</i> co-assembly_AMZ I-A-ETNP	AMZ I	A		Eastern Tropical North Pacific AMZ, 100m	1272309			Combined Assembly of SAGs	159733	36.21		Combined assembly of <i>Prochlorococcus</i> SAGs SCGC AD-598_B06, SCGC AD-598_P08, SCGC AD-598_E21
<i>Prochlorococcus</i> co-assembly_AMZ I-A-ETSP	AMZ I	A		Eastern Tropical South Pacific AMZ, 53m	3778549			Combined Assembly of SAGs	159733	90.72		Combined assembly of <i>Prochlorococcus</i> SAGs SCGC AC-669_E6, SCGC AC-669_L2, SCGC AC-669_M7, and SCGC AC-669_N22
<i>Prochlorococcus</i> co-assembly_AMZ I-B-ETNP	AMZ I	B		Eastern Tropical North Pacific AMZ, 100m	3683744			Combined Assembly of SAGs	159733	81.9		Combined assembly of <i>Prochlorococcus</i> SAGs SCGC AD-598_D22, SCGC AD-598_A14, SCGC AD-598_N22, SCGC AD-598_C06, SCGC AD-598_D21, SCGC AD-598_A20, and SCGC AD-598_I02
<i>Prochlorococcus</i> co-assembly_AMZ I-B-ETSP	AMZ I	B		Eastern Tropical South Pacific AMZ, 53m	5060980			Combined Assembly of SAGs	159733	98.28		Combined assembly of <i>Prochlorococcus</i> SAGs SCGC AC-669_I9, SCGC AC-669_P19, SCGC AC-669_J22, and SCGC AC-669_K20
<i>Prochlorococcus</i> co-assembly_AMZ II	AMZ II			Eastern Tropical North Pacific AMZ, 100m	4333338			Combined Assembly of SAGs	159733	100		Combined assembly of <i>Prochlorococcus</i> SAGs SCGC AG937_M18, SCGC AG937_P09, SCGC AG937_D14, and SCGC AG937_C04
<i>Prochlorococcus</i> co-assembly_AMZ III	AMZ III			Eastern Tropical North Pacific AMZ, 100m	6365660			Combined Assembly of SAGs	159733	96.55		Combined assembly of <i>Prochlorococcus</i> SAGs SCGC AG937_J11, SCGC AG937_J05, SCGC AG937_N07, SCGC AG937_K16, and SCGC AG937_G21

Other <i>Prochlorococcus</i>	Clade / Ecotype	Sub-clade	Accession number / GI	Isolation Site	Assembled Sequence Size (bp)	GC Content (%)	Num Genes	Genome Status	NCBI Taxonomy ID	CheckM completeness (%)	CheckM contamination (%)	Comments
<i>Prochlorococcus</i> bacterium JGI 01_M5			2724679602 / (Biosample Acc. No.) SAMN07626394	North Pacific Subtropical Gyre, Station ALOHA, 25m	504819	32	614	WGS	2035230			
<i>Prochlorococcus</i> bacterium JGI 01_N12			2747842495 / (Biosample Acc. No.) SAMN07626393	North Pacific Subtropical Gyre, Station ALOHA, 25m	431211	32	517	WGS	2035231			
<i>Prochlorococcus</i> bacterium JGI 02_M7			2739367794	North Pacific Subtropical Gyre, Station ALOHA, 125m	754061	32	896	WGS	1218			
<i>Prochlorococcus</i> bacterium JGI 02_N20			2724679624	North Pacific Subtropical Gyre, Station ALOHA, 125m	753236	50	789	WGS	1218			
<i>Prochlorococcus</i> marinus JGI GoM_1m_183_B01			(Biosample Acc. No.) SAMN02787045	Gulf of Mexico 1m	397407	31.12	525	SAG				
<i>Prochlorococcus</i> marinus JGI GoM_1m_183_H02			(Biosample Acc. No.) SAMN02787031	Gulf of Mexico 1m	1131810	31.42	1337	SAG				
<i>Prochlorococcus</i> marinus JGI GoM_1m_183_H07			(Biosample Acc. No.) SAMN02787032	Gulf of Mexico 1m	523192	31.8	646	SAG				
<i>Prochlorococcus</i> SCGC AAA795-F05			(Biosample Acc. No.) SAMEA3368573	Red Sea, Saudi Arabia	1418370	31.4	1564	SAG	1945637			
<i>Prochlorococcus</i> SCGC AAA795-I06			(Biosample Acc. No.) SAMEA3368574	Red Sea, Saudi Arabia	1388770	31.1	1525	SAG	1219			
<i>Prochlorococcus</i> SCGC AAA795-I15			(Biosample Acc. No.) SAMEA3368575	Red Sea, Saudi Arabia	1282940	31.3	1393	SAG	1219			
<i>Prochlorococcus</i> SCGC AAA795-J16			(Biosample Acc. No.) SAMEA3368576	Red Sea, Saudi Arabia	1463720	31	1625	SAG	1219			
<i>Prochlorococcus</i> SCGC AAA795-M23			(Biosample Acc. No.) SAMEA3368577	Red Sea, Saudi Arabia	1443990	31.2	1626	SAG	1219			
<i>Prochlorococcus</i> sp. AS9601	HL II		CP000551 / 123197646	Arabian Sea, 50m	1669886	31.32	1988	complete	146891			
<i>Prochlorococcus</i> sp. EQPAC1	HL I		JNAG00000000 / 691664703	Equatorial Pacific, 30m	1654739	30.8	1954	complete	190047			

Prochlorococcus sp. GP2	HL II	NZ_JNAH00000000 / 695327059	Western Pacific, 150m	1624310	31.2	1863	complete	59925
Prochlorococcus sp. HNLC1	HL III / IV	NZ_GL947594; NZ_ADHP01000000 / 482790805	Pacific and Indian Oceans	1569623	-	1867	complete	1041938
Prochlorococcus sp. HNLC2	HL III / IV	NZ_GL947595; NZ_ADHP01000000 / 482790806	Pacific and Indian Oceans	1484494	-	1737	complete	1041939
Prochlorococcus sp. HOT_208_60	HL II	(Biosample Acc. No.) SAMN06290256	North Pacific Subtropical Gyre, Station ALOHA, 60m	886656	31.2	1162	SAG	1219
Prochlorococcus sp. HOT208_60m_805A16	HL II	(Biosample Acc. No.) SAMN06345441	North Pacific Subtropical Gyre, Station ALOHA, 60m	999350	31.2	1121	SAG	1219
Prochlorococcus sp. HOT208_60m_808A10	HL II	(Biosample Acc. No.) SAMN06345443	North Pacific Subtropical Gyre, Station ALOHA, 60m	1164130	31.2		SAG	1219
Prochlorococcus sp. HOT208_60m_808G21	HL II	(Biosample Acc. No.) SAMN06345444	North Pacific Subtropical Gyre, Station ALOHA, 60m	1270810	31.4	1382	SAG	1219
Prochlorococcus sp. HOT208_60m_808M21	HL II	(Biosample Acc. No.) SAMN06345445	North Pacific Subtropical Gyre, Station ALOHA, 60m	1489920	31.2	1658	SAG	1219
Prochlorococcus sp. HOT208_60m_810B23	HL II	(Biosample Acc. No.) SAMN06345446	North Pacific Subtropical Gyre, Station ALOHA, 60m	1577010	31.1	1743	SAG	1219
Prochlorococcus sp. HOT208_60m_810P02	HL II	(Biosample Acc. No.) SAMN06345447	North Pacific Subtropical Gyre, Station ALOHA, 60m	1290000	31.3	1429	SAG	1219
Prochlorococcus sp. HOT208_60m_813B04	HL II	(Biosample Acc. No.) SAMN06345448	North Pacific Subtropical Gyre, Station ALOHA, 60m	1210360	31.3	1309	SAG	1219
Prochlorococcus sp. HOT208_60m_813E23	HL II	(Biosample Acc. No.) SAMN06345449	North Pacific Subtropical Gyre, Station ALOHA, 60m	525465	31.5	571	SAG	1219
Prochlorococcus sp. HOT208_60m_813G15	HL II	(Biosample Acc. No.) SAMN06345450	North Pacific Subtropical Gyre, Station ALOHA, 60m	1405140	31.2	1556	SAG	1219
Prochlorococcus sp. HOT208_60m_813I02	HL II	(Biosample Acc. No.) SAMN06345451	North Pacific Subtropical Gyre, Station ALOHA, 60m	1498340	31.4	1634	SAG	1219
Prochlorococcus sp. HOT208_60m_813L03	HL II	(Biosample Acc. No.) SAMN06345452	North Pacific Subtropical Gyre, Station ALOHA, 60m	1180540	31.3	1314	SAG	1219
Prochlorococcus sp. HOT208_60m_813O04	HL II	(Biosample Acc. No.) SAMN06345453	North Pacific Subtropical Gyre, Station ALOHA, 60m	1147140	31.3	0	SAG	1219
Prochlorococcus sp. HOT208_60m_813O14	HL II	(Biosample Acc. No.) SAMN06345454	North Pacific Subtropical Gyre, Station ALOHA, 60m	1353740	31.3	1509	SAG	1219
Prochlorococcus sp. HOT212_60m_823D04	HL II	(Biosample Acc. No.) SAMN06345455	North Pacific Subtropical Gyre, Station ALOHA, 60m	390622	31.3	0	SAG	1219
Prochlorococcus sp. HOT212_60m_824C06	HL II	(Biosample Acc. No.) SAMN06345456	North Pacific Subtropical Gyre, Station ALOHA, 60m	1021540	31.2	1145	SAG	1219
Prochlorococcus sp. HOT212_60m_824E10	HL II	(Biosample Acc. No.) SAMN06345457	North Pacific Subtropical Gyre, Station ALOHA, 60m	1173340	31.3	1311	SAG	1219
Prochlorococcus sp. HOT212_60m_824O11	HL II	(Biosample Acc. No.) SAMN06345458	North Pacific Subtropical Gyre, Station ALOHA, 60m	999839	31.7	0	SAG	1219
Prochlorococcus sp. HOT212_60m_826P21	HL II	(Biosample Acc. No.) SAMN06345459	North Pacific Subtropical Gyre, Station ALOHA, 60m	1263730	31.3	1422	SAG	1219
Prochlorococcus sp. LG	LL II	NZ_JNAT00000000 / 739029033	Sargasso Sea, 120m	1754063	36.4	1956	complete	167556
Prochlorococcus sp. MED4 (also CMP1986)	HL I	BX548174 / 33772317	Mediterranean Sea, 5m	1657990	30.8	1999	complete	59919
Prochlorococcus sp. MIT 0601	LL III	JNAU00000000 / 691690737	North Pacific, Station ALOHA 125m	1707342	37	1934	WGS	1499498

Prochlorococcus sp. MIT 0602	LL II / III	JNAV00000000 / 691694844	North Pacific, Station ALOHA 125m	1750918	36.3	1998	WGS	1499499
Prochlorococcus sp. MIT 0603	LL II / III	JNAW00000000 / 691694851	North Pacific, Station ALOHA 125m	1752482	36.3	2015	WGS	1499500
Prochlorococcus sp. MIT 0604	HL II	CP007753 / 689266968	North Pacific, Station ALOHA 175m	1780061	31.2	2085	complete	1501268
Prochlorococcus sp. MIT 0701	LL IV	JNBA00000000 / 691706675	South Atlantic, 150m	2592571	53	3079	WGS	1499502
Prochlorococcus sp. MIT 0702	LL IV	JNBB00000000 / 691708265	South Atlantic, 150m	2583057	61	3066	WGS	1499503
Prochlorococcus sp. MIT 0703	LL IV	JNBC00000000 / 691714664	South Atlantic, 150m	2575057	61	3054	WGS	1499504
Prochlorococcus sp. MIT 0801 (also HTCC1603)	LL I	CP007754 / 689269199	Sargasso Sea, 40m	1929203	34.9	2287	complete	1501269
Prochlorococcus sp. MIT0912	LLI	2681812899	North Pacific Subtropical Gyre, Station ALOHA, 175m	1898947	35	2206	WGS	
Prochlorococcus sp. MIT0913	LLI	2681812900	North Pacific Subtropical Gyre, Station ALOHA, 175m	1877877	35	2203	WGS	
Prochlorococcus sp. MIT0915	LLI	2681812901	North Pacific Subtropical Gyre, Station ALOHA, 175m	1988105	35	2252	WGS	
Prochlorococcus sp. MIT0917	LLI	2681812859	North Pacific Subtropical Gyre, Station ALOHA, 200m	1924674	35	2224	WGS	
Prochlorococcus sp. MIT0918	LLII/III	2681812902	North Pacific Subtropical Gyre, Station ALOHA, 175m	1789313	35	1997	WGS	
Prochlorococcus sp. MIT0919	LLII/III	2681812903	North Pacific Subtropical Gyre, Station ALOHA, 175m	1716770	37	1927	WGS	
Prochlorococcus sp. MIT1013	LLI	2681812904	North Pacific Subtropical Gyre, Station ALOHA, 150m	2046712	35	2428	WGS	
Prochlorococcus sp. MIT1205	LLIV	2681813566	North Pacific Subtropical Gyre, Station ALOHA, 175m	2527266	50	2674	WGS	
Prochlorococcus sp. MIT1214	LLI	2681813567	North Pacific Subtropical Gyre, Station ALOHA, 175m	1934849	35	2206	WGS	
Prochlorococcus sp. MIT1223	Not Assigned	2681813568	North Pacific Subtropical Gyre, Station ALOHA, 175m	1795922	36	1991	WGS	
Prochlorococcus sp. MIT1227	LLIV	2681813569	North Pacific Subtropical Gyre, Station ALOHA, 124m	2530891	51	2760	WGS	
Prochlorococcus sp. MIT1300	Not Assigned	2681813570	North Pacific Subtropical Gyre, Station ALOHA, 150m	1855146	41	2020	WGS	
Prochlorococcus sp. MIT1303	LLIV	2681812923	North Pacific Subtropical Gyre, Station ALOHA, 150m	2554803	50	2705	WGS	
Prochlorococcus sp. MIT1304	LLII/III	2681813571	North Pacific Subtropical Gyre, Station ALOHA, 150m	1762159	35	1952	WGS	
Prochlorococcus sp. MIT1306	LL IV	LVHL01000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	2498944	50.5		WGS	
Prochlorococcus sp. MIT1307	Not Assigned	2681813572	North Pacific Subtropical Gyre, Station ALOHA, 150m	2032419	40	2198	WGS	
Prochlorococcus sp. MIT1312	LL IV	LVHM01000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	2561499	50.5		WGS	
Prochlorococcus sp. MIT1313	LL IV	LVHN01000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	2590341	50		WGS	
Prochlorococcus sp. MIT1314	HLII	2681813573	North Pacific Subtropical Gyre, Station ALOHA, 150m	1704447	31	1982	WGS	

Prochlorococcus sp. MIT1320	LL IV	LVHP01000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	2500454	50.3		WGS	
Prochlorococcus sp. MIT1323	LL IV	LVHQ01000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	2440679	50.6		WGS	
Prochlorococcus sp. MIT1341	Not Assigned	2681813574	North Pacific Subtropical Gyre, Station ALOHA, 150m	1937096	40	2090	WGS	
Prochlorococcus sp. MIT1418	LLIV	2681813575	North Pacific Subtropical Gyre, Station ALOHA, 150m	2598653	50	2764	WGS	
Prochlorococcus sp. MIT1342	LL IV	LVHS01000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	2548000	50.3		WGS	
Prochlorococcus sp. MIT 9107	HL II	NZ_JNAI00000000 / 695325385	Tropical Pacific, 25m	1699937	31	1966	complete	59921
Prochlorococcus sp. MIT 9116	HL II	NZ_JNAJ00000000 / 695315231	Tropical Pacific, 25m	1685398	31	1947	complete	167544
Prochlorococcus sp. MIT 9123	HL II	NZ_JNAK00000000 / 695325219	Tropical Pacific, 25	1697748	31	1981	complete	167545
Prochlorococcus sp. MIT 9201	HL II	NZ_JNAL00000000 / 695324810	Tropical Pacific, Surface	1672416	31.3	1963	complete	93057
Prochlorococcus sp. MIT 9202	HL II	ACDW00000000 / 219152118	South Pacific, 79m	1691453	31.14	2039	WGS	93058
Prochlorococcus sp. MIT 9211	LL III	CP000878 / 159887716	Equatorial Pacific, 83m	1688963	38.01	1986	complete	93059
Prochlorococcus sp. MIT 9215	HL II	CP000825 / 157386913	Equatorial Pacific, surface	1738790	31.15	2076	complete	93060
Prochlorococcus sp. MIT 9301	HL II	CP000576 / 126542380	Sargasso Sea, 90m	1641879	31.34	1964	complete	167546
Prochlorococcus sp. MIT 9302	HL II	NZ_JNAM00000000 / 695329408	Sargasso Sea, 100m	1725456	31.1	1998	complete	74545
Prochlorococcus sp. MIT 9303	LL IV	CP000554 / 123962000	Sargasso Sea, 100m	2682807	50.01	3303	complete	59922
Prochlorococcus sp. MIT 9311	HL II	NZ_JNAN00000000 / 739046599	Gulf stream, 135m	1711064	31.2	1969	complete	167547
Prochlorococcus sp. MIT 9312	HL II	NC_007577 / 78778385	Gulf Stream, 135m	1709204	31.21	1857	complete	74546
Prochlorococcus sp. MIT 9313	LL IV	BX548175 / 33772318	Gulf Stream, 135m	2410873	50.74	3044	complete	74547
Prochlorococcus sp. MIT 9314	HL II	NZ_JNAO00000000 / 695317421	Gulf stream, 180m	1690556	31.2	1973	complete	167548
Prochlorococcus sp. MIT 9321	HL II	NZ_JNAP00000000 / 695319270	Equatorial Pacific, 50m	1658664	31.2	1936	complete	167549
Prochlorococcus sp. MIT 9322	HL II	NZ_JNAQ00000000 / 695319424	Equatorial Pacific, Surface	1657550	31.1	1939	complete	167550
Prochlorococcus sp. MIT 9401	HL II	NZ_JNAR00000000 / 695325035	Sargasso Sea, Surface	1666808	31.2	1954	complete	167551
Prochlorococcus sp. MIT 9515	HL I	CP000552 / 123199600	Equatorial Pacific, 15m	1704176	30.79	1991	complete	167542
Prochlorococcus sp. NATL1A	LL I	CP000553 / 123959780	Northern Atlantic, 30m	1864731	34.98	2283	complete	167555
Prochlorococcus sp. NATL2A	LL I	CP000095 / 154949252	Northern Atlantic, 10m	1842899	35.12	2235	complete	59920
Prochlorococcus sp. PAC1	LL I	NZ_JNAX00000000 / 739026823	North Pacific, Station ALOHA 100m	1841163	35.2	2234	complete	59924

This entry is the master record for a whole genome shotgun sequencing project and contains no sequence data

Prochlorococcus sp. REDSEA-S17_B1		2651870162	Red Sea, Saudi Arabia, 25m	1070099	31	1471	Metagenome- assembled Genome	1218		
Prochlorococcus sp. REDSEA-S22_B1		2651870163	Red Sea, Saudi Arabia, 10m	1010391	31	1338	Metagenome- assembled Genome	1218		
Prochlorococcus sp. REDSEA-S23_B1		2651870164	Red Sea, Saudi Arabia, 25m	1058971	31	1381	Metagenome- assembled Genome	1218		
Prochlorococcus sp. REDSEA-S28_B1		2651870165	Red Sea, Saudi Arabia, 10m	926852	31	1181	Metagenome- assembled Genome	1218		
Prochlorococcus sp. RS01		(Biosample Acc. No.) NZ_CP018345.1	Red Sea, Saudi Arabia, surface water	1657700	31.4	1842	SAG	1219		
Prochlorococcus sp. RS04		(Biosample Acc. No.) NZ_CP018346.1	Red Sea, Saudi Arabia, surface water	1656320	31.4	1840	SAG	1219		
Prochlorococcus sp. RS50		(Biosample Acc. No.) NZ_CP018344.1	Red Sea, Saudi Arabia, surface water	1656130	31.4	1842	SAG	1219		
Prochlorococcus sp. SB	HL II	NZ_JNAS00000000 / 695322273	Western Pacific, 40m	1669823	31.5	1911	complete	59926		
Prochlorococcus sp. scB241_526B17	HL II	(Biosample Acc. No.) SAMN02647043	Bermuda Atlantic Time Series (BATS) station site, 60m	1107740	31.3		SAG	65.72		0.77
Prochlorococcus sp. scB241_526B19	HL II	(Biosample Acc. No.) SAMN02647111	Bermuda Atlantic Time Series (BATS) station site, 60m	469441	31.6		SAG	32.41		0.81
Prochlorococcus sp. scB241_526B22	HL II	(Biosample Acc. No.) SAMN02647112	Bermuda Atlantic Time Series (BATS) station site, 60m	934681	31.6		SAG	59.59		0.91
Prochlorococcus sp. scB241_526D20	HL II	(Biosample Acc. No.) SAMN02671311	Bermuda Atlantic Time Series (BATS) station site, 60m	1318930	31.4		SAG	77.63		0.54
Prochlorococcus sp. scB241_526K3	HL II	(Biosample Acc. No.) SAMN02671312	Bermuda Atlantic Time Series (BATS) station site, 60m	1133450	31.2		SAG	66.6		1.18
Prochlorococcus sp. scB241_526N5	HL II	(Biosample Acc. No.) SAMN02671313	Bermuda Atlantic Time Series (BATS) station site, 60m	489145	31.1		SAG	31.9		0
Prochlorococcus sp. scB241_526N9	HL II	(Biosample Acc. No.) SAMN02671314	Bermuda Atlantic Time Series (BATS) station site, 60m	1271230	31.2		SAG	72.13		0.54
Prochlorococcus sp. scB241_527E14	HL II	(Biosample Acc. No.) SAMN02671315	Bermuda Atlantic Time Series (BATS) station site, 60m	1108550	31.3		SAG	68.76		0.28
Prochlorococcus sp. scB241_527E15	HL II	(Biosample Acc. No.) SAMN02671316	Bermuda Atlantic Time Series (BATS) station site, 60m	579043	31.5		SAG	34.48		0
Prochlorococcus sp. scB241_527G5	HL II	(Biosample Acc. No.) SAMN02671317	Bermuda Atlantic Time Series (BATS) station site, 60m	1170830	31.1		SAG	69.31		0.41
Prochlorococcus sp. scB241_527I9	HL II	(Biosample Acc. No.) SAMN02671318	Bermuda Atlantic Time Series (BATS) station site, 60m	1148290	31.6		SAG	75.52		0.27
Prochlorococcus sp. scB241_527L15	HL II	(Biosample Acc. No.) SAMN02671319	Bermuda Atlantic Time Series (BATS) station site, 60m	1190530	31.5		SAG	70.55		1.59
Prochlorococcus sp. scB241_527L16	HL II	(Biosample Acc. No.) SAMN02671320	Bermuda Atlantic Time Series (BATS) station site, 60m	977191	31.1		SAG	47.41		0
Prochlorococcus sp. scB241_527L22	HL II	(Biosample Acc. No.) SAMN02671321	Bermuda Atlantic Time Series (BATS) station site, 60m	1517740	31.3		SAG	92.44		0.63

Prochlorococcus sp. scB241_527N11	HL II	(Biosample Acc. No.) SAMN02671322	Bermuda Atlantic Time Series (BATS) station site, 60m	1476940	31.3	SAG	84.56	1.12
Prochlorococcus sp. scB241_527P5	HL II	(Biosample Acc. No.) SAMN02671323	Bermuda Atlantic Time Series (BATS) station site, 60m	1464890	31.3	SAG	87.76	1
Prochlorococcus sp. scB241_528J14	HL II	(Biosample Acc. No.) SAMN02671324	Bermuda Atlantic Time Series (BATS) station site, 60m	1183090	31.1	SAG	64.86	1.22
Prochlorococcus sp. scB241_528J8	HL II	(Biosample Acc. No.) SAMN02671325	Bermuda Atlantic Time Series (BATS) station site, 60m	1577550	31.3	SAG	92.62	1.39
Prochlorococcus sp. scB241_528K19	HL II	(Biosample Acc. No.) SAMN02671326	Bermuda Atlantic Time Series (BATS) station site, 60m	1448090	31.3	SAG	86.59	1.09
Prochlorococcus sp. scB241_528N17	HL II	(Biosample Acc. No.) SAMN02671327	Bermuda Atlantic Time Series (BATS) station site, 60m	1530060	31.3	SAG	93.43	0.41
Prochlorococcus sp. scB241_528N20	HL II	(Biosample Acc. No.) SAMN02671328	Bermuda Atlantic Time Series (BATS) station site, 60m	1144510	31.4	SAG	72.42	1.18
Prochlorococcus sp. scB241_528N8	HL II	(Biosample Acc. No.) SAMN02671329	Bermuda Atlantic Time Series (BATS) station site, 60m	1378440	31.3	SAG	81.11	0.63
Prochlorococcus sp. scB241_528O2	HL II	(Biosample Acc. No.) SAMN02671330	Bermuda Atlantic Time Series (BATS) station site, 60m	1531690	31	SAG	91.3	0.36
Prochlorococcus sp. scB241_528P14	HL II	(Biosample Acc. No.) SAMN02671331	Bermuda Atlantic Time Series (BATS) station site, 60m	1104130	31.1	SAG	41.38	0
Prochlorococcus sp. scB241_528P18	HL II	(Biosample Acc. No.) SAMN02671332	Bermuda Atlantic Time Series (BATS) station site, 60m	1464300	31.3	SAG	86.6	0.56
Prochlorococcus sp. scB241_529B19	HL II	(Biosample Acc. No.) SAMN02671333	Bermuda Atlantic Time Series (BATS) station site, 60m	1480310	31.5	SAG	88	1.18
Prochlorococcus sp. scB241_529C4	HL II	(Biosample Acc. No.) SAMN02671334	Bermuda Atlantic Time Series (BATS) station site, 60m	1606810	31.3	SAG	96.38	0.27
Prochlorococcus sp. scB241_529D18	HL II	(Biosample Acc. No.) SAMN02671335	Bermuda Atlantic Time Series (BATS) station site, 60m	1511450	31.4	SAG	90.13	0.68
Prochlorococcus sp. scB241_529J11	HL II	(Biosample Acc. No.) SAMN02671336	Bermuda Atlantic Time Series (BATS) station site, 60m	1338230	31.5	SAG	84.01	1.04
Prochlorococcus sp. scB241_529J15	HL II	(Biosample Acc. No.) SAMN02671337	Bermuda Atlantic Time Series (BATS) station site, 60m	1601050	31.2	SAG	94.57	0.27
Prochlorococcus sp. scB241_529J16	HL II	(Biosample Acc. No.) SAMN02671338	Bermuda Atlantic Time Series (BATS) station site, 60m	951023	31.8	SAG	63	1.63
Prochlorococcus sp. scB241_529O19	HL II	(Biosample Acc. No.) SAMN02671339	Bermuda Atlantic Time Series (BATS) station site, 60m	1305640	31.7	SAG	87.14	0.54
Prochlorococcus sp. scB243_495D8	HL II	(Biosample Acc. No.) SAMN02671340	Bermuda Atlantic Time Series (BATS) station site, 60m	1227850	31.4	SAG	79.89	0.27
Prochlorococcus sp. scB243_495G23	HL II	(Biosample Acc. No.) SAMN02671341	Bermuda Atlantic Time Series (BATS) station site, 60m	1452950	31.3	SAG	85.55	0.14
Prochlorococcus sp. scB243_495I8	HL II	(Biosample Acc. No.) SAMN02671342	Bermuda Atlantic Time Series (BATS) station site, 60m	370192	32.4	SAG	22.42	0.36
Prochlorococcus sp. scB243_495K23	HL II	(Biosample Acc. No.) SAMN02671343	Bermuda Atlantic Time Series (BATS) station site, 60m	1620140	31.3	SAG	96.92	0
Prochlorococcus sp. scB243_495L20	HL II	(Biosample Acc. No.) SAMN02671344	Bermuda Atlantic Time Series (BATS) station site, 60m	1569360	31.3	SAG	97.74	0.54
Prochlorococcus sp. scB243_495N16	HL II	(Biosample Acc. No.) SAMN02671345	Bermuda Atlantic Time Series (BATS) station site, 60m	1434400	31.3	SAG	85.6	0.86
Prochlorococcus sp. scB243_495N3	HL II	(Biosample Acc. No.) SAMN02671346	Bermuda Atlantic Time Series (BATS) station site, 60m	901033	31.3	SAG	57.07	1.27

Prochlorococcus sp. scB243_495N4	HL II	(Biosample Acc. No.) SAMN02671347	Bermuda Atlantic Time Series (BATS) station site, 60m	1192260	31.4	SAG	62.77	1.27
Prochlorococcus sp. scB243_495P20	HL II	(Biosample Acc. No.) SAMN02671348	Bermuda Atlantic Time Series (BATS) station site, 60m	986037	31.3	SAG	62.77	0.82
Prochlorococcus sp. scB243_496A2	HL II	(Biosample Acc. No.) SAMN02671349	Bermuda Atlantic Time Series (BATS) station site, 60m	1439940	31.4	SAG	91.58	2.17
Prochlorococcus sp. scB243_496E10	HL II	(Biosample Acc. No.) SAMN02671350	Bermuda Atlantic Time Series (BATS) station site, 60m	1097830	31.3	SAG	65.07	0.33
Prochlorococcus sp. scB243_496G15	HL II	(Biosample Acc. No.) SAMN02671351	Bermuda Atlantic Time Series (BATS) station site, 60m	1378310	31.2	SAG	81.7	2.17
Prochlorococcus sp. scB243_496M6	HL II	(Biosample Acc. No.) SAMN02671352	Bermuda Atlantic Time Series (BATS) station site, 60m	977410	31.3	SAG	58.92	1.22
Prochlorococcus sp. scB243_496N4	HL II	(Biosample Acc. No.) SAMN02671353	Bermuda Atlantic Time Series (BATS) station site, 60m	1453960	31.4	SAG	90.76	0.95
Prochlorococcus sp. scB243_497E17	HL II	(Biosample Acc. No.) SAMN02671354	Bermuda Atlantic Time Series (BATS) station site, 60m	552203	31.8	SAG	35.19	0.82
Prochlorococcus sp. scB243_497I20	HL II	(Biosample Acc. No.) SAMN02671355	Bermuda Atlantic Time Series (BATS) station site, 60m	1020800	31.6	SAG	71.42	0.66
Prochlorococcus sp. scB243_497J18	HL II	(Biosample Acc. No.) SAMN02671356	Bermuda Atlantic Time Series (BATS) station site, 60m	1401750	31.3	SAG	82.97	1.14
Prochlorococcus sp. scB243_497N18	HL II	(Biosample Acc. No.) SAMN02671357	Bermuda Atlantic Time Series (BATS) station site, 60m	675744	31.8	SAG	38.43	0
Prochlorococcus sp. scB243_498A3	HL II	(Biosample Acc. No.) SAMN02671358	Bermuda Atlantic Time Series (BATS) station site, 60m	1472540	31.3	SAG	92.07	0.59
Prochlorococcus sp. scB243_498B22	HL II	(Biosample Acc. No.) SAMN02671359	Bermuda Atlantic Time Series (BATS) station site, 60m	1476140	31.2	SAG	91.98	0.63
Prochlorococcus sp. scB243_498B23	HL II	(Biosample Acc. No.) SAMN02671360	Bermuda Atlantic Time Series (BATS) station site, 60m	1236610	31.1	SAG	76.09	1.09
Prochlorococcus sp. scB243_498C16	HL II	(Biosample Acc. No.) SAMN02671361	Bermuda Atlantic Time Series (BATS) station site, 60m	1477230	31.2	SAG	92.45	0.23
Prochlorococcus sp. scB243_498F21	HL II	(Biosample Acc. No.) SAMN02671362	Bermuda Atlantic Time Series (BATS) station site, 60m	1398810	31.1	SAG	83.79	1.31
Prochlorococcus sp. scB243_498G3	HL II	(Biosample Acc. No.) SAMN02671363	Bermuda Atlantic Time Series (BATS) station site, 60m	1054290	31.1	SAG	63.65	0.69
Prochlorococcus sp. scB243_498I20	HL II	(Biosample Acc. No.) SAMN02671364	Bermuda Atlantic Time Series (BATS) station site, 60m	1589860	31.3	SAG	94.63	0
Prochlorococcus sp. scB243_498J20	HL II	(Biosample Acc. No.) SAMN02671365	Bermuda Atlantic Time Series (BATS) station site, 60m	860969	31.3	SAG	47.99	1.22
Prochlorococcus sp. scB243_498L10	HL II	(Biosample Acc. No.) SAMN02671366	Bermuda Atlantic Time Series (BATS) station site, 60m	1348560	31.1	SAG	78.76	0.82
Prochlorococcus sp. scB243_498M14	HL II	(Biosample Acc. No.) SAMN02671367	Bermuda Atlantic Time Series (BATS) station site, 60m	949651	30.9	SAG	41.38	1.72
Prochlorococcus sp. scB243_498N4	HL II	(Biosample Acc. No.) SAMN02671368	Bermuda Atlantic Time Series (BATS) station site, 60m	1412290	31.3	SAG	85.51	0.54
Prochlorococcus sp. scB243_498N8	HL II	(Biosample Acc. No.) SAMN02671369	Bermuda Atlantic Time Series (BATS) station site, 60m	907618	31.1	SAG	53.86	0.69
Prochlorococcus sp. scB243_498P15	HL II	(Biosample Acc. No.) SAMN02671370	Bermuda Atlantic Time Series (BATS) station site, 60m	1460430	31.5	SAG	93.61	0.82
Prochlorococcus sp. scB243_498P3	HL II	(Biosample Acc. No.) SAMN02671371	Bermuda Atlantic Time Series (BATS) station site, 60m	1432250	31.1	SAG	79.71	1.49

Prochlorococcus sp. scB245a_518A17	HL II	(Biosample Acc. No.) SAMN02671372	Bermuda Atlantic Time Series (BATS) station site, 60m	1625270	31.3	SAG	97.39	0.77
Prochlorococcus sp. scB245a_518A6	HL II	(Biosample Acc. No.) SAMN02671373	Bermuda Atlantic Time Series (BATS) station site, 60m	1372700	31.4	SAG	83.11	1.36
Prochlorococcus sp. scB245a_518D8	HL II	(Biosample Acc. No.) SAMN02671374	Bermuda Atlantic Time Series (BATS) station site, 60m	1439680	32.1	SAG	27.59	0
Prochlorococcus sp. scB245a_518E10	HL II	(Biosample Acc. No.) SAMN02671375	Bermuda Atlantic Time Series (BATS) station site, 60m	1327380	31.5	SAG	81.97	0.14
Prochlorococcus sp. scB245a_518I6	HL II	(Biosample Acc. No.) SAMN02671376	Bermuda Atlantic Time Series (BATS) station site, 60m	1368540	31.5	SAG	88.29	0.28
Prochlorococcus sp. scB245a_518J7	HL II	(Biosample Acc. No.) SAMN02671377	Bermuda Atlantic Time Series (BATS) station site, 60m	1382480	31.5	SAG	83.53	1.31
Prochlorococcus sp. scB245a_518K17	HL II	(Biosample Acc. No.) SAMN02671378	Bermuda Atlantic Time Series (BATS) station site, 60m	1405160	31.3	SAG	83.61	1.04
Prochlorococcus sp. scB245a_518O7	HL II	(Biosample Acc. No.) SAMN02671379	Bermuda Atlantic Time Series (BATS) station site, 60m	1469990	31.2	SAG	82.84	0.14
Prochlorococcus sp. scB245a_519A13	HL II	(Biosample Acc. No.) SAMN02671380	Bermuda Atlantic Time Series (BATS) station site, 60m	1149560	31.1	SAG	65.49	0.36
Prochlorococcus sp. scB245a_519B7	HL II	(Biosample Acc. No.) SAMN02671381	Bermuda Atlantic Time Series (BATS) station site, 60m	698939	31.5	SAG	31.03	0
Prochlorococcus sp. scB245a_519C7	HL II	(Biosample Acc. No.) SAMN02671382	Bermuda Atlantic Time Series (BATS) station site, 60m	1366170	31.4	SAG	87.36	1.31
Prochlorococcus sp. scB245a_519D13	HL II	(Biosample Acc. No.) SAMN02671383	Bermuda Atlantic Time Series (BATS) station site, 60m	1409850	31.4	SAG	85.01	1.36
Prochlorococcus sp. scB245a_519E23	HL II	(Biosample Acc. No.) SAMN02671384	Bermuda Atlantic Time Series (BATS) station site, 60m	1218090	31.5	SAG	75.32	0.14
Prochlorococcus sp. scB245a_519G16	HL II	(Biosample Acc. No.) SAMN02671385	Bermuda Atlantic Time Series (BATS) station site, 60m	1310230	31.3	SAG	77.45	1.02
Prochlorococcus sp. scB245a_519L21	HL II	(Biosample Acc. No.) SAMN02671386	Bermuda Atlantic Time Series (BATS) station site, 60m	1431710	31.2	SAG	86.19	1.36
Prochlorococcus sp. scB245a_519O11	HL II	(Biosample Acc. No.) SAMN02671387	Bermuda Atlantic Time Series (BATS) station site, 60m	1284450	31.2	SAG	75.33	1.04
Prochlorococcus sp. scB245a_519O21	HL II	(Biosample Acc. No.) SAMN02671388	Bermuda Atlantic Time Series (BATS) station site, 60m	1264470	31.6	SAG	83.7	0.54
Prochlorococcus sp. scB245a_520B18	HL II	(Biosample Acc. No.) SAMN02671389	Bermuda Atlantic Time Series (BATS) station site, 60m	1430670	31.3	SAG	84.06	1.45
Prochlorococcus sp. scB245a_520D2	HL II	(Biosample Acc. No.) SAMN02671390	Bermuda Atlantic Time Series (BATS) station site, 60m	1019840	31.4	SAG	60.78	0.68
Prochlorococcus sp. scB245a_520E22	HL II	(Biosample Acc. No.) SAMN02671391	Bermuda Atlantic Time Series (BATS) station site, 60m	1136820	31.2	SAG	65.53	0.14
Prochlorococcus sp. scB245a_520F22	HL II	(Biosample Acc. No.) SAMN02671392	Bermuda Atlantic Time Series (BATS) station site, 60m	1353700	31.5	SAG	87.45	0.41
Prochlorococcus sp. scB245a_520K10	HL II	(Biosample Acc. No.) SAMN02671393	Bermuda Atlantic Time Series (BATS) station site, 60m	1453630	31.5	SAG	92.16	1.22
Prochlorococcus sp. scB245a_520M11	HL II	(Biosample Acc. No.) SAMN02671394	Bermuda Atlantic Time Series (BATS) station site, 60m	400975	31.3	SAG	8.62	0
Prochlorococcus sp. scB245a_521A19	HL II	(Biosample Acc. No.) SAMN02671395	Bermuda Atlantic Time Series (BATS) station site, 60m	1160540	31.1	SAG	70.99	1.68
Prochlorococcus sp. scB245a_521B10	HL II	(Biosample Acc. No.) SAMN02671396	Bermuda Atlantic Time Series (BATS) station site, 60m	1555090	31.2	SAG	93.57	1.09

Prochlorococcus sp. scB245a_521C8	HL II	(Biosample Acc. No.) SAMN02671397	Bermuda Atlantic Time Series (BATS) station site, 60m	966833	31.3		SAG	59.11	2.26
Prochlorococcus sp. scB245a_521K15	HL II	(Biosample Acc. No.) SAMN02671398	Bermuda Atlantic Time Series (BATS) station site, 60m	1482920	31.3		SAG	88.9	0.54
Prochlorococcus sp. scB245a_521M10	HL II	(Biosample Acc. No.) SAMN02671399	Bermuda Atlantic Time Series (BATS) station site, 60m	1142710	31		SAG	44.83	0
Prochlorococcus sp. scB245a_521N3	HL II	(Biosample Acc. No.) SAMN02671400	Bermuda Atlantic Time Series (BATS) station site, 60m	621899	31.6		SAG	37.41	1.49
Prochlorococcus sp. scB245a_521N5	HL II	(Biosample Acc. No.) SAMN02671401	Bermuda Atlantic Time Series (BATS) station site, 60m	830606	31.4		SAG	44.75	1.07
Prochlorococcus sp. scB245a_521O20	HL II	(Biosample Acc. No.) SAMN02671402	Bermuda Atlantic Time Series (BATS) station site, 60m	1516360	31.2		SAG	87.68	0.68
Prochlorococcus sp. scB245a_521O23	HL II	(Biosample Acc. No.) SAMN02671403	Bermuda Atlantic Time Series (BATS) station site, 60m	895440	31.7		SAG	59.78	1.46
Prochlorococcus sp. SS120 (also CCMP1375)	LL II	AE017126 / 33238865	Sargasso Sea, 120m	1751080	36.44	2016	complete	167539	
Prochlorococcus sp. SS2	LL II	NZ_JNAY0000000 / 739015208	Sargasso Sea, 120	1752772	36.4	1972	complete	167552	
Prochlorococcus sp. SS35	LL II	NZ_JNAZ00000000 / 739028712	Sargasso Sea, 120	1751015	36.5	1959	complete	167553	
Prochlorococcus sp. SS51	LL II	NZ_JNBD00000000 / 739011222	Sargasso Sea, 120	1746977	36.4	1958	complete	167554	
Prochlorococcus sp. SS52	LL II / III	JNBE00000000 / 691714834	Sargasso Sea, 120	1754053	36.4	1987	complete	1499501	
Prochlorococcus sp. TMED223		(Biosample Acc. No.) SAMN06972077	Mediterranean Sea	1718360	47.6	1806	Metagenome-assembled Genome	1986612	
Prochlorococcus sp. W10	HL IV	ALPH00000000	Equatorial Pacific Ocean, 15m	561998	31	1051	SAG	613201	
Prochlorococcus sp. W11	HL IV	ALPI00000000	Equatorial Pacific Ocean, 15m	766829	31	968	SAG	613202	
Prochlorococcus sp. W12	HL IV	ALPJ00000000	Equatorial Pacific Ocean, 15m	423437	30	754	SAG	613203	
Prochlorococcus sp. W2	HL IV	ALPB00000000	Equatorial Pacific Ocean, 15m	1266767	30	1581	SAG	1203261	
Prochlorococcus sp. W3	HL III	ALPC00000000	Equatorial Pacific Ocean, 15m	339045	31	592	SAG	569152	
Prochlorococcus sp. W4	HL IV	ALPD00000000	Equatorial Pacific Ocean, 15m	765485	30	1046	SAG	569153	
Prochlorococcus sp. W5	HL III	ALPL00000000	Equatorial Pacific Ocean, 15m	99467	30	204	SAG	569154	
Prochlorococcus sp. W7	HL III	ALPE00000000	Equatorial Pacific Ocean, 15m	905221	31	1135	SAG	613198	
Prochlorococcus sp. W8	HL III	ALPF00000000	Equatorial Pacific Ocean, 15m	841756	31	979	SAG	613199	
Prochlorococcus sp. W9	HL III	ALPG00000000	Equatorial Pacific Ocean, 15m	420150	31	741	SAG	613200	

(Marine) Synechococcus	Clade	Sub-clade	Accession number / GI	Isolation Site	Assembled Sequence Size (bp)	GC Content (%)	Num Genes	Genome Status	NCBI Taxonomy ID	Comments
Synechococcus bacterium JGI 01_K19			(Biosample Acc. No.) SAMN07626391	North Pacific Subtropical Gyre, Station ALOHA, 25 m	1140941	59	1347		2035229	

Synechococcus bacterium JGI 01_L10			(Biosample Acc. No.) SAMN07626390	North Pacific Subtropical Gyre, Station ALOHA, 25 m	843611	60	1057		2035228
Synechococcus bacterium JGI 01_L14			2739367788	North Pacific Subtropical Gyre, Station ALOHA, 25 m	486181	57	635	SAG	1129
Synechococcus bacterium JGI 01_L16			2738541244	North Pacific Subtropical Gyre, Station ALOHA, 25 m	608306	59	727	SAG	1129
Synechococcus bacterium JGI 01_L19			2724679895	North Pacific Subtropical Gyre, Station ALOHA, 25 m	465766	60	597	SAG	1129
Synechococcus bacterium JGI 01_L22			(Biosample Acc. No.) SAMN07626388	North Pacific Subtropical Gyre, Station ALOHA, 25 m	750528	58	880		2035233
Synechococcus bacterium JGI 01_L7			(Biosample Acc. No.) SAMN07626392	North Pacific Subtropical Gyre, Station ALOHA, 25 m	1385468	58	1690		2035234
Synechococcus bacterium JGI 02_L19			(Biosample Acc. No.) SAMN07626395	North Pacific Subtropical Gyre, Station ALOHA, 125 m	1780813	54	2113		2035227
Synechococcus sp. BL107	IIId	5.1	NZ_AATZ00000000 / 116072915	Blanes Bay, Mediterranean Sea, 100m	2283377	54	2555	WGS	313625
Synechococcus sp. BS55D			NZ_PHQT00000000.1	Black Sea	2235220	61.6	2314		
Synechococcus sp. BS56D			NZ_PHQU00000000.1	Black Sea	2303820	61.2			
Synechococcus sp. CB0101		5.2	NZ_ADXL00000000 / 317512211	Chesapeake Bay,	2686395	64	3049	WGS	232348
Synechococcus sp. CB0205		5.2	NZ_ADXM00000000 / 317512116	Chesapeake Bay,	2427308	63	2766	WGS	232363
Synechococcus sp. CC9311	IIId	5.1	NC_008319 / 113952711	California current, Pacific (coastal), 95m	2606748	52.45	2761	complete	64471
Synechococcus sp. CC9605	IIIC	5.1A	NC_007516 / 78211558	California current, Pacific (oligotrophic), 51m	2510659	59.22	2761	complete	110662
Synechococcus sp. CC9616			(Biosample Acc. No.) SAMN02597268	California Current	2645910	56.5	2803		
Synechococcus sp. CC9616		5.1	AZXL00000000	Eastern Pacific Ocean	2645910	56.52	2958	WGS	
Synechococcus sp. CC9902	IIId	5.1	NC_007513 / 78183584	California current, Pacific (oligotrophic), 5m	2234828	54.16	2410	complete	316279
Synechococcus sp. KORDI-100			CP006269 / 670925746	Seawater, Pacific Ocean	2789000	57	3058	complete	1280380
Synechococcus sp. KORDI-49			CP006270 / 670928808	Seawater, East China Sea	2585813	61	2717	complete	585423
Synechococcus sp. KORDI-52			CP006271 / 670931543	Seawater, East China Sea	2572069	59	2823	complete	585425
Synechococcus sp. MIT S9504	5.1B		LVHT00000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	3087290	55.4	3354		
Synechococcus sp. MIT S9508	5.1B		LVHU01000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	2502430	56	2735		
Synechococcus sp. MIT S9509	5.1B		LVHV01000000	North Pacific Subtropical Gyre, Station ALOHA, 150m	3087930	55.4	3381		
Synechococcus sp. NKBG042902			(Biosample Acc. No.) SAMD00000348	coastal areas in Nagasaki, Japan	3319480	49.4	3228		
Synechococcus sp. NKBG15041c			(Biosample Acc. No.) SAMD00036772	coastal seawater at Okinawa prefecture in Japan	3180040	49.3	3020		
Synechococcus sp. OG1			NZ_FXBO00000000	Marine cyanobacterial communities from the University of California, Santa Cruz, USA	3433936	49	3277	WGS	1938863

Synechococcus sp. OG1			(Biosample Acc. No.) SAMN06272755	Sea water, Santa Cruz, USA	3433940	49.2	3277	WGS	1938863	
Synechococcus sp. PCC 7002			NC_010475 / 170076636	Isolated from a mud sample that came from the fish pens from Magueyes Island in Puerto Rico	3409935	49	3237	complete	32049	
Synechococcus sp. PCC 73109			GCA_001521855.1		3298680	49.33	3029			
Synechococcus sp. RCC307	IIb	5.3	NC_009482 / 148241099	Mediterranean Sea, 15m	2224914	60.84	2588	complete	316278	
Synechococcus sp. REDSEA-S01_B1			(Biosample Acc. No.) SAMN04534664	Red Sea	1799130	62.8				
Synechococcus sp. REDSEA-S02_B4			(Biosample Acc. No.) SAMN04534665	Red Sea	1776300	62.8				
Synechococcus sp. RS9916	IIId	5.1	AAUA01000001 / 116068221	Gulf of Aqaba, Red Sea, in front of Eilat, 10m	2664465	59.81	3010	WGS	221359	
Synechococcus sp. RS9917	I	5.1	AANP01000001 / 86168751	Gulf of Aqaba, Red Sea, in front of Eilat, 10m	2579542	64.46	2822	WGS	221360	
Synechococcus sp. SynAce01			CP018091	Antarctica: Ace Lake, Vestfold Hills	2750634	64	2783	complete	1916956	Available in IMG/ER under ID 2718218441
Synechococcus sp. TMED155			(Biosample Acc. No.) SAMN06972009	Mediterranean Sea	1401200	62.2	1572	Metagenome-assembled Genome		
Synechococcus sp. TMED169			(Biosample Acc. No.) SAMN06972023	Mediterranean Sea	1521240	57.9	1751	Metagenome-assembled Genome		
Synechococcus sp. TMED185			(Biosample Acc. No.) SAMN06972039	Mediterranean Sea	1424570	61.1	1629	Metagenome-assembled Genome		
Synechococcus sp. TMED187			(Biosample Acc. No.) SAMN06972041	Mediterranean Sea	1839990	59.6	1926	Metagenome-assembled Genome		
Synechococcus sp. TMED19			(Biosample Acc. No.) SAMN06971873	Mediterranean Sea	2074880	60.1	2297	Metagenome-assembled Genome		
Synechococcus sp. TMED20			(Biosample Acc. No.) SAMN06971874	Mediterranean Sea	3607270	53.7	3786	Metagenome-assembled Genome		
Synechococcus sp. TMED205			(Biosample Acc. No.) SAMN06972059	Mediterranean Sea	1280390	63.1	1394	Metagenome-assembled Genome		
Synechococcus sp. TMED66			(Biosample Acc. No.) SAMN06971920	Mediterranean Sea	2153440	53.8	2390	Metagenome-assembled Genome		
Synechococcus sp. TMED90			(Biosample Acc. No.) SAMN06971944	Mediterranean Sea	1781050	59.4	1969	Metagenome-assembled Genome		
Synechococcus sp. UW105	XVI	5.1	(Biosample Acc. No.) SAMEA4707922	Atlantic Ocean, Sargasso Sea	2659417	57.5	2807	WGS	337067	
Synechococcus sp. UW69	XV	5.1	(Biosample Acc. No.) SAMEA4707923	Atlantic Ocean, Sargasso Sea	2372121	58.7	2556	WGS	368493	
Synechococcus sp. WH5701	I	5.2	AANO01000001 / 87284397	Long Island Sound, USA,	3043834	65.38	3403	WGS	69042	
Synechococcus sp. WH7803	IIIA	5.1	NC_009481 / 148238336	Sargasso Sea, 25m	2366980	60.24	1	complete	32051	
Synechococcus sp. WH7803			(Biosample Acc. No.) SAMEA3138264	Bermuda Atlantic Time Series (BATS) station site, 60m	2366980	60.2	2528			
Synechococcus sp. WH7805	II	5.1	AAOK01000001 / 88788291	Sargasso Sea, 95m	2620367	57.63	2937	WGS	59931	
Synechococcus sp. WH8016	Ib	5.1	NZ_AGIK00000000 / 352097207	Woods Hole, USA	2706690	54	3046	WGS	166318	
Synechococcus sp. WH8020			(Biosample Acc. No.) SAMN03436066	North Atlantic	2661170	53.1	2814			

Has been renamed from Synechococcus (published name) to Prochlorococcus based on 16S tree from Phil Hugenholz

Synechococcus sp. WH8101			2837243552	Coastal seawater collected at Woods Hole, MA	2630292	63.34	2908	WGS	59932
Synechococcus sp. WH8102	IIIc	5.1	NC_005070 / 33864539	Sargasso Sea	2434428	59.41	2588	complete	80000251
Synechococcus sp. WH8103			(Biosample Acc. No.) SAMEA3233744	Open Ocean	2429690	59.5	2602		
Synechococcus sp. WH8109	IIa	5.1	CP006882 / 572996165	Sargasso Sea,	2111515	60	2713	complete	166314
Unclassified Synechococcus Bin 27			2651870080	Northern Gulf of Mexico, 16m	1701602	62	2161	Metagenome-assembled Genome	1129
Unclassified Synechococcus Bin 28			2651870082	Northern Gulf of Mexico, 16m	1175935	62	1532	Metagenome-assembled Genome	
Unclassified Synechococcus Bin 28-1			2651870081	Northern Gulf of Mexico, 16m	1320301	60	1624	Metagenome-assembled Genome	
Uncultured Synechococcus sp. AG-323-A01	VII	5.1B	2716884599	North Pacific Ocean	186509	50	242	SAG	
Uncultured Synechococcus sp. AG-323-A11	VII	5.1B	2716884600	North Pacific Ocean	233099	51	277	SAG	
Uncultured Synechococcus sp. AG-323-F11			2716884601	North Pacific Ocean	226596	51	223	SAG	
Uncultured Synechococcus sp. AG-323-G20	I	5.1A	2716884602	North Pacific Ocean	399696	44	464	SAG	
Uncultured Synechococcus sp. AG-323-Q22	Not Assigned	Not Assigned	2716884603	North Pacific Ocean	429502	46	485	SAG	
Uncultured Synechococcus sp. AG-420-M02	Not Assigned	Not Assigned	2716884604	North Pacific Ocean	890062	59	1069	SAG	
Uncultured Synechococcus sp. AG-450-D21			2716884605	North Pacific Ocean	234750	52	267	SAG	
Uncultured Synechococcus sp. AG-450-M17	Not Assigned	Not Assigned	2716884606	North Pacific Ocean	790263	56	928	SAG	
Uncultured Synechococcus sp. AG-670-A04	II	5.1A	2716884607	North Pacific Ocean	1188716	59	1519	SAG	
Uncultured Synechococcus sp. AG-670-A05	III	5.1A	2716884608	North Pacific Ocean	2005017	57	2471	SAG	
Uncultured Synechococcus sp. AG-670-A19	II	5.1A	2716884609	North Pacific Ocean	1348818	58	1721	SAG	
Uncultured Synechococcus sp. AG-670-B23	II	5.1A	2716884610	North Pacific Ocean	2266122	57	2768	SAG	
Uncultured Synechococcus sp. AG-670-D07	III/XV	5.1A	2716884611	North Pacific Ocean	1514310	56	1748	SAG	
Uncultured Synechococcus sp. AG-670-F04	III/XV	5.1A	2716884612	North Pacific Ocean	2247766	53	2494	SAG	
Uncultured Synechococcus sp. AG-670-F22	VII	5.1B	2716884613	North Pacific Ocean	1971543	56	2351	SAG	
Uncultured Synechococcus sp. AG-670-G20	II	5.1A	2716884614	North Pacific Ocean	970395	58	1206	SAG	
Uncultured Synechococcus sp. AG-673-A03	VII	5.1B	2716884615	North Pacific Ocean	1867264	56	2212	SAG	
Uncultured Synechococcus sp. AG-673-A10	CDR2	CDR2	2716884616	North Pacific Ocean	1605296	55	1883	SAG	

Uncultured Synechococcus sp. AG-673-B04	CDR2	CDR2	2716884666	North Pacific Ocean	1402151	56	1740	SAG
Uncultured Synechococcus sp. AG-673-B08	CDR2	CDR2	2716884617	North Pacific Ocean	1566036	55	1840	SAG
Uncultured Synechococcus sp. AG-673-D02	VII	5.1B	2716884257	North Pacific Ocean	2201799	56	2597	SAG
Uncultured Synechococcus sp. AG-673-F03	VII	5.1B	2716884618	North Pacific Ocean	2004490	56	2332	SAG
Uncultured Synechococcus sp. AG-676-A03	CDR2	CDR2	2716884619	North Pacific Ocean	454271	57	544	SAG
Uncultured Synechococcus sp. AG-676-A21	VII	5.1B	2716884667	North Pacific Ocean	1887431	56	2166	SAG
Uncultured Synechococcus sp. AG-676-C06	VII	5.1B	2716884620	North Pacific Ocean	2044761	56	2429	SAG
Uncultured Synechococcus sp. AG-676-E04	Not Assigned	Not Assigned	2716884258	North Pacific Ocean	579549	55	643	SAG
Uncultured Synechococcus sp. AG-676-E23	VII	5.1B	2716884621	North Pacific Ocean	1604488	56	1908	SAG
Uncultured Synechococcus sp. AG-676-F02	CDR2	CDR2	2716884622	North Pacific Ocean	1527331	55	1842	SAG
Uncultured Synechococcus sp. AG-679-A02	VII	5.1B	2716884668	North Pacific Ocean	1747571	55	2120	SAG
Uncultured Synechococcus sp. AG-679-A04	VII	5.1B	2716884669	North Pacific Ocean	2278993	55	2710	SAG
Uncultured Synechococcus sp. AG-679-B05	CDR2	CDR2	2716884670	North Pacific Ocean	1875601	56	2287	SAG
Uncultured Synechococcus sp. AG-679-B21	CDR2	CDR2	2716884623	North Pacific Ocean	1025533	55	1237	SAG
Uncultured Synechococcus sp. AG-679-C18	I	5.1A	2716884671	North Pacific Ocean	2626211	49	2917	SAG
Uncultured Synechococcus sp. AG-679-D13	CDR2	CDR2	2716884624	North Pacific Ocean	2062147	56	2382	SAG
Uncultured Synechococcus sp. AG-679-E23	VII	5.1B	2716884672	North Pacific Ocean	1993060	56	2289	SAG
Uncultured Synechococcus sp. AG-683-A02	I	5.1A	2716884625	North Pacific Ocean	696769	52	849	SAG
Uncultured Synechococcus sp. AG-683-A03	I	5.1A	2716884626	North Pacific Ocean	1541395	53	1884	SAG
Uncultured Synechococcus sp. AG-683-A22	IV	5.1A	2716884627	North Pacific Ocean	1031668	52	1288	SAG
Uncultured Synechococcus sp. AG-683-B03	IV	5.1A	2716884673	North Pacific Ocean	1109525	52	1368	SAG
Uncultured Synechococcus sp. AG-683-B21	IV	5.1A	2716884674	North Pacific Ocean	1434371	53	1708	SAG
Uncultured Synechococcus sp. AG-683-C23	IV	5.1A	2716884628	North Pacific Ocean	1914326	53	2253	SAG
Uncultured Synechococcus sp. AG-683-F20	VII	5.1B	2716884629	North Pacific Ocean	972807	56	1154	SAG
Uncultured Synechococcus sp. AG-683-G11	VII	5.1B	2716884675	North Pacific Ocean	1287575	56	1544	SAG

Uncultured Synechococcus sp. AG-686-A03	I	5.1A	2716884630	North Pacific Ocean	1558360	53	1848	SAG
Uncultured Synechococcus sp. AG-686-A05	I	5.1A	2716884676	North Pacific Ocean	269552	55	293	SAG
Uncultured Synechococcus sp. AG-686-B21	IV	5.1A	2716884631	North Pacific Ocean	1849691	53	2197	SAG
Uncultured Synechococcus sp. AG-686-C21	IV	5.1A	2716884677	North Pacific Ocean	1053969	53	1280	SAG
Uncultured Synechococcus sp. AG-686-C23	IV	5.1A	2716884678	North Pacific Ocean	569328	54	703	SAG
Uncultured Synechococcus sp. AG-686-D09	VII	5.1B	2716884679	North Pacific Ocean	786300	51	958	SAG
Uncultured Synechococcus sp. AG-686-F08	I	5.1A	2716884680	North Pacific Ocean	1578770	52	1854	SAG

Ancestors of the (marine) ProSyn lineage	Clade	Sub-clade	Accession number / GI	Isolation Site	Assembled Sequence Size (bp)	GC Content (%)	Num Genes	Genome Status	NCBI Taxonomy ID	Comments
Acaryochloris marina MBIC11017			NC_009925.1	First isolated from extracts of didemnid ascidians	8361599	47.3	8488	complete	329726	
Acaryochloris sp CCMEE 5410			NZ_AFEJ00000000.1	Surface	7875477	47	7587		310037	
Cyanobium gracile PCC 6307	I	5.2	(Biosample Acc. No.) SAMN02261330	Freshwater	3342364	69	3439		292564	
Cyanobium sp. CACIAM 14			(Biosample Acc. No.) SAMN02767986	Tucuruí Hydroelectric Dam, State of Pará, Brazil	3212489	69	3240		1496688	
Cyanobium sp. PCC7001	I	5.2	ABSE00000000 / 194270186	Soil, intertidal zone mud, City Island, New York	2834252	69	2826	WGS	180281	
Gloeobacter kilauensis JS1			2558309063	epilithic biofilm in a lava cave in Kīlauea Caldera, Hawai'i, USA.	4724791	61	4562		1183438	
Gloeobacter violaceus PCC 7421			NC_005125 / 37519569	Calcareous rock in Switzerland	4659019	62	4490	complete	251221	Lacks thylakoid membranes
Leptolyngbya boryana dg5			(Biosample Acc. No.) SAMD00019989	Freshwater	6803470	47.013	6375	complete		
Leptolyngbya boryana IAM M-101			(Biosample Acc. No.) SAMD00019988		6803470	47.013	6376	complete		Previously known as Plectonema boryanum UTEX B 485
Leptolyngbya boryana PCC 6306			(Biosample Acc. No.) SAMN02261250	lake near Madison, Wisconsin, USA	7262450	47	6795	WGS		
Leptolyngbya ohadii IS1			(Biosample Acc. No.) SAMN07204499	Biological soil crust, Nitzana, Israel	7902460	52.1	6692	WGS		
Leptolyngbya sp. 2LT21S03			2509601021	Biological soil crust, Nitzana, Israel	7799549	51.42	8798	WGS		
Leptolyngbya sp. 'hensonii'			(Biosample Acc. No.) SAMN06074267	pinnacle phototroph mat, Florida USA	5940030	52.3	5318	WGS		
Leptolyngbya sp. BC1307			(Biosample Acc. No.) SAMN07551813	Microbial mat on Lake Hoare margin, Antarctica	4916580	52.9		WGS		
Leptolyngbya sp. Heron Island J			(Biosample Acc. No.) SAMN02469314	Heron Island, Australia	8064170	48	7037	WGS		
Leptolyngbya sp. JSC-1			(Biosample Acc. No.) SAMN02743038	Fresh water	7866820	50.7	6491	WGS		
Leptolyngbya sp. KIOST-1			(Biosample Acc. No.) SAMN02953965	Spirulina culture pond, Ansan, South Korea	6320120	59.4	5717	WGS		

Leptolyngbya sp. NIES-2104	(Biosample Acc. No.) SAM00020894	Terrestrial, isolated from crusts of Nostoc commune HK-02 (NIES-2114) at Himeji, Hyogo, Japan	6386310	47.4	6166	WGS	
Leptolyngbya sp. NIES-3755	(Biosample Acc. No.) SAM00042786	Terrestrial, isolated from soil at the Toyohashi University of Technology, Toyohashi, Aichi, Japan	6761660	46.6565	6603	complete	
Leptolyngbya sp. O-77	(Biosample Acc. No.) SAM00045841	hot spring at Aso-Kuju National Park, Kumamoto, Japan	5480260	55.9	4644	complete	
Leptolyngbya sp. PCC 6406	(Biosample Acc. No.) SAMN02261357	Fresh water, California, USA	5776960	55.2	5134	WGS	
Leptolyngbya sp. PCC 7375	(Biosample Acc. No.) SAMN02256520	Plankton, Woods Hole region, Massachusetts, USA	9422970	47.6	8176	WGS	
Leptolyngbya sp. PCC 7376	(Biosample Acc. No.) SAMN02232033	Crystal Cave (limestone), Bermuda	5125950	43.9	4578	complete	
Leptolyngbya valderiana BDU 20041	(Biosample Acc. No.) SAMN04508134	Epiphyte on wood in sea collected at Point Calimere, Bay of Bengal region, Tamil Nadu, India	6991350	59.8	5922	WGS	
Pseudanabaena biceps PCC 7429	(Biosample Acc. No.) SAMN02261350	Sphagnum bog, near Kastanienbaum, Vierwaldstattersee, Switzerland	5476420	43.2	4699	WGS	
Pseudanabaena sp. 'Roaring Creek'	(Biosample Acc. No.) SAMN03854406	Freshwater from Roaring Creek Reservoir, USA	5477810	43.3	4884	WGS	
Pseudanabaena sp. PCC 6802	(Biosample Acc. No.) SAMN02261339		5621880	47.8	5265	WGS	Formerly designated Anacystis nidulans Berkeley strain no. 6301
Pseudanabaena sp. PCC 7367	NC_019701.1		4885680	46.2126	3976	complete	
Pseudanabaena sp. SR411	(Biosample Acc. No.) SAMN06761459	Water from Susquehanna River, Union County, USA	5780030	42.2	5287	WGS	
Synechococcus elongatus PCC 6301	637000307	Waller Creek, Austin, Texas, USA	2696255	55	2585		269084
Synechococcus elongatus PCC 7942	(Biosample Acc. No.) SAMN02598254	Freshwater lake in California	2742269	55	2719		1140
Synechococcus elongatus UTEX 2973	SAMN03278348	Waller Creek, Texas, USA	2744630	55.4675	2745	complete	1350461
Synechococcus leopoliensis UTEX 625a	2517572104	Waller Creek, Texas, USA	2690127	55.47	2723	complete	1237671
Synechococcus sp. 1G10	(Biosample Acc. No.) SAMN07427896	Argentina: Nahuel Huapia	3340220	64.6	3496		
Synechococcus sp. 8F6	(Biosample Acc. No.) SAMN07427898	Mexico: Lake Alchichicha	2510700	65.8	2692		
Synechococcus sp. BO 8801	(Biosample Acc. No.) SAMN07427895	Switzerland: Lake Constance	3271180	69.2	3270		
Synechococcus sp. GFB01	(Biosample Acc. No.) SAMN03736791	dos Índios Lagoon, Amapá state, Brazil	2339810	67.8	2513		
Synechococcus sp. JA-2-3Ba(2-13)	NC_007776 / 86607503	Top 2mm of microbial mat samples from Octopus Spring Yellowstone National Park	3046682	58	2947	complete	321332
Synechococcus sp. JA-3-3Ab	NC_007775 / 86604733	Top 2mm of microbial mat samples from Octopus Spring Yellowstone National Park	2932766	60.24	2900	complete	321327

Synechococcus sp. Lanier	(Biosample Acc. No.) SAMN05915837	Lake Lanier metagenome	1475740	51.4	1647			
Synechococcus sp. LL	(Biosample Acc. No.) SAMN07427899	Italy: Lake Albano	3548880	68.4	3564			
Synechococcus sp. MW101C3	(Biosample Acc. No.) SAMN07427897	Austria: Lake Mondsee	3029140	66.1	2952			
Synechococcus sp. PCC 6312	NC_019680 / 427711179	Fresh water, California, USA., 1963	3720499	49	3794	complete	195253	Analyzed in: Shih PM et al., Proc Natl Acad Sci U S A. 2013 Jan 15;110(3):1053-1058)
Synechococcus sp. PCC 7003	(Biosample Acc. No.) SAMN04422302	isolated from sand at the edge of a clam bed in Greenwich, CT, USA	3345090	49.3031	3177			
Synechococcus sp. PCC 7117	(Biosample Acc. No.) SAMN04422303	low-salinity brine pond in Port Hedland, Western Australia	3432100	49.1233	3273			
Synechococcus sp. PCC 73109	(Biosample Acc. No.) SAMN04422304	sea water taken on City Island, NY, USA	3298680	49.3382	3139			
Synechococcus sp. PCC 7335	NZ_ABRV00000000 / 194018188	Snail shell, intertidal zone, Puerto Penasco, Mexico	5973558	48	5626	WGS	91464	
Synechococcus sp. PCC 7336	NZ_CM001776 / 482909597	Sea water, tank, Berkeley, California, USA, 1971	5140668	54	4768	complete	195250	Deeply branching cyanobacteria according to 16S; not a Synechococcus (Shih PM et al., Proc Natl Acad Sci U S A. 2013 Jan 15;110(3):1053-1058)
Synechococcus sp. PCC 7502	NC_019702 / 428220140	Sphagnum bog (species of mosses)	3583735	41	3669	complete	1173263	Deeply branching cyanobacteria according to 16S; not a Synechococcus (Shih PM et al., Proc Natl Acad Sci U S A. 2013 Jan 15;110(3):1053-1058)
Synechococcus sp. PCC 8807	(Biosample Acc. No.) SAMN04422305	lagoon near Port Gentil, Gabon	3304090	49.3702	3179			
Synechococcus sp. SynAce01	NZ_CP018091.1	Ace Lake, Vestfold Hills, Antarctica	2750630	63.9	2849			
Synechococcus sp. Tous	(Biosample Acc. No.) SAMN05915836	Tous New Dam on river Júcar, Valencia, Spain	1791670	52.6	1989			
Thermosynechococcus elongatus BP-1	NC_004113 / 22297544	Beppu hot spring in Japan	2593857	54	2555	complete	197221	
Thermosynechococcus sp. NK55	NC_023033 / 571026788	Nakabusa hot spring 1500m altitude	2520064	54	2497	complete	1394889	

N/A = Not Available
WGS = Whole Genome Shotgun – not closed genome
SAG = Single-cell Amplified Genome

Table S2. Abbreviations of selected genes present and absent in AMZ *Prochlorococcus*.

Gene	KEGG Orthology term / gene name	KO/COG/PFAM
<i>por</i>	Light dependent protochlorophyllide oxido-reductase	K00218
<i>hemF</i>	Oxygen-dependent coproporphyrinogen-III oxidase	K00228
<i>hemG</i>	Protoporphyrinogen IX dehydrogenase	K00230
<i>acsF1</i>	Magnesium-protoporphyrin IX monomethyl ester [oxidative] cyclase 1	K04035
<i>ho1</i>	Heme oxygenase 1	K00510
<i>hemN1</i>	Coproporphyrinogen-III oxidase	K02495
<i>acsF2</i>	Magnesium-protoporphyrin IX monomethyl ester [oxidative] cyclase 2	K04035
<i>ho2</i>	heme oxygenase 2	K00510
<i>hemN2</i>	Oxygen-independent coproporphyrinogen-III oxidase	K02495
<i>crtL2</i>	lycopene epsilon cyclase	K06444
<i>pcCao</i>	chlorophyllide a oxygenase	COG4638
<i>bfr</i>	Bacterioferritin	K03594
<i>dvr</i>	Divinyl chlorophyllide a 8-vinyl-reductase	K19073
<i>apcA</i>	Allophycocyanin alpha chain	K02092
<i>apcB</i>	Allophycocyanin beta chain	K02093
<i>apcC</i>	Phycobilisome 7.8 kDa linker polypeptide	K02094
<i>apcD</i>	Allophycocyanin subunit alpha-B	K02095
<i>apcE</i>	Anchor polypeptide LCM	K02096
<i>apcF</i>	Allophycocyanin beta-18 subunit	K02097
<i>cpcA</i>	C-phycocyanin subunit alpha	K02284
<i>cpcB</i>	C-phycocyanin subunit beta	K02285
<i>cpcC</i>	Phycobilisome rod linker polypeptide	K02286
<i>cpcD</i>	allophycocyanin linker domain protein	K02287
<i>cpcE</i>	Phycocyanobilin lyase subunit alpha	K02288
<i>cpcF</i>	Phycocyanobilin lyase subunit beta	K02289
<i>cpcG</i>	Phycobilisome rod-core linker polypeptide	K02290
<i>cpeA/mpeA</i>	C-phycoerythrin class I subunit alpha/C-phycoerythrin class II subunit alpha	K05376
<i>cpeB/mpeB</i>	C-phycoerythrin class I subunit beta/C-phycoerythrin class II subunit beta	K05377
<i>cpeC</i>	Phycobilisome linker polypeptide	K05378
<i>cpeD</i>	Phycoerythrin-associated linker protein	K05379
<i>cpeE</i>	Phycocyanin-associated rod linker protein	K05380
<i>cpeR</i>	C-phycoerythrin operon regulator	K05381
<i>cpeS</i>	Phycoerythrobilin lyase	K05382
<i>cpeT</i>	Phycoerythrin linker	K05383
<i>cpeU/mpeU</i>	PBS lyase	K05384
<i>cpeY</i>	Bilin biosynthesis protein	K05385
<i>cpeZ</i>	Bilin biosynthesis protein	K05386
<i>pcbA</i>	Divinyl chlorophyll a/b light-harvesting protein PcbA	K08918
<i>pcbB</i>	Divinyl chlorophyll a/b light-harvesting protein PcbB	K08919
<i>pcbC</i>	Divinyl chlorophyll a/b light-harvesting protein PcbC	K08925
<i>pcbD</i>	Divinyl chlorophyll a/b light-harvesting protein PcbD	K08921
<i>pcbE</i>	Divinyl chlorophyll a/b light-harvesting protein PcbE	K08922
<i>pcbF</i>	Divinyl chlorophyll a/b light-harvesting protein PcbF	K08923
<i>pcbG</i>	Divinyl chlorophyll a/b light-harvesting protein PcbG	K08924

<i>pcbH</i>	Divinyl chlorophyll a/b light-harvesting protein PcbH	K08925
<i>isiA</i>	Iron stress-induced chlorophyll-binding protein	K08921
<i>kaiA</i>	Circadian clock protein KaiA	K08480
<i>kaiB</i>	Circadian clock protein KaiB	K08481
<i>kaiC</i>	Circadian clock protein KaiC	K08482
<i>cop23</i>	Circadian oscillating protein COP23	pfam14218
<i>sasA</i>	Adaptive-response sensory-kinase SasA	K08479
<i>hcp</i>	Hydroxylamine reductase	K05601
<i>fnr</i>	fnr CRP/FNR family transcriptional regulator, anaerobic regulatory protein	K01420
<i>ytfE, scdA</i>	regulator of cell morphogenesis and NO signaling	K07322
<i>nirA</i>	Ferredoxin--nitrite reductase	K00366
<i>narB</i>	Nitrate reductase	K00367
<i>narK</i>	Nitrate/nitrite transporter	K02575
<i>cynT</i>	Carbonic anhydrase	K01673
<i>cynS</i>	Cyanate hydratase	K01725
<i>nitT/ABC.SN.S</i>	ABC-type nitrate/sulfonate/bicarbonate transport system, periplasmic component	K02051
<i>nitT/ABC.SN.P</i>	ABC-type nitrate/sulfonate/bicarbonate transport system, permease component	K02050
<i>nitT/ABC.SN.A</i>	ABC-type nitrate/sulfonate/bicarbonate transport system, ATPase component	K02049
<i>moaE</i>	Molybdopterin synthase catalytic subunit	K03635
<i>moaD</i>	Molybdopterin synthase sulfur carrier subunit	K03636
<i>moaC</i>	Molybdenum cofactor biosynthesis protein MoaC	K03637
<i>moaB</i>	Molybdenum cofactor biosynthesis protein B MoaB	K03638
<i>moaA</i>	Molybdenum cofactor biosynthesis protein MoaA	K03639
<i>moeA</i>	Molybdopterin molybdenumtransferase	K03750
<i>mobA</i>	Molybdenum cofactor guanylyltransferase	K03752
<i>urtA</i>	Urea ABC transporter substrate-binding protein	K11959
<i>urtB</i>	Urea ABC transporter permease subunit UrtB	K11960
<i>urtC</i>	Urea ABC transport, permease component UrtC	K11961
<i>urtD</i>	ABC-type high affinity urea uptake system ATPase component	K11962
<i>urtE</i>	Urea transport system ATP-binding protein	K11963
<i>ureC</i>	Urease subunit alpha	K01428
<i>ureB</i>	Urease subunit beta	K01429
<i>ureA</i>	Urease subunit gamma	K01430
<i>ureE</i>	Urease accessory protein UreE	K03187
<i>ureF</i>	Urease accessory protein UreF	K03188
<i>ureG</i>	Urease accessory protein UreG	K03189
<i>ureD</i>	Urease accessory protein UreD	K03190
<i>ugpA</i>	sn-glycerol-3-phosphate transport system permease protein	K05814
<i>ugpB</i>	sn-glycerol-3-phosphate-binding periplasmic protein	K05813
<i>ugpC</i>	sn-glycerol-3-phosphate import ATP-binding protein Ugp	K05816
<i>ugpE</i>	sn-glycerol-3-phosphate transport system permease protein	K05815
<i>glpK</i>	Glycerol kinase	K00864
<i>glpD</i>	Glycerol-3-phosphate dehydrogenase	K00111
<i>dld</i>	Quinone-dependent D-lactate dehydrogenase	K03777
<i>pfor</i>	Pyruvate:ferredoxin oxidoreductase	K03737
<i>melB</i>	Na+/galactoside symporter	K03292

aldA
adh

Aldehyde dehydrogenase (NAD+)
Alcohol dehydrogenase

K00128
K13953

Table S3. Presence (+)—Absence (·) of selected genes in individual AMZ *Prochlorococcus* SAGs.

SAG	IMG	Clade /	COG4638	K00111	K00128	K00218	K00228	K00366	K00367	K00510	K00510	K00864	K01420	K01428	K01429	K01430	K01673	K02051
Name	ID	Gene	<i>pcCao</i>	<i>glpD</i>	<i>aldA</i>	<i>por</i>	<i>hemF</i>	<i>nirA</i>	<i>narB</i>	<i>ho1</i>	<i>ho2</i>	<i>glpK</i>	<i>fnr</i>	<i>ureC</i>	<i>ureB</i>	<i>ureA</i>	<i>cynT</i>	<i>nitT/ABC.SN.S</i>
Prochlorococcus sp. SCGC AC 669 E6	2626541501	AMZ IA	+	·	+	+	·	+	+	+	·	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 I11	2626541503	AMZ IB	·	+	+	·	·	+	·	+	+	+	·	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 I15	2626541504	AMZ IA	+	·	·	·	+	+	+	+	·	·	·	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 I23	2626541505	AMZ IB	·	+	+	+	·	+	+	+	·	+	+	·	·	·	·	·
Prochlorococcus sp. SCGC AC 669 I4	2626541506	AMZ IB	·	·	+	·	·	·	·	+	·	·	·	+	·	·	·	·
Prochlorococcus sp. SCGC AC 669 I9	2626541507	AMZ IB	·	+	+	+	·	+	·	+	+	+	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 J11	2626541509	AMZ IB	·	+	+	+	+	·	+	+	+	+	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 J17	2626541510	AMZ IB	·	+	+	+	·	+	·	+	·	+	·	·	·	·	·	·
Prochlorococcus sp. SCGC AC 669 J2	2626541513	AMZ IB	·	·	·	+	·	·	·	·	·	·	+	+	·	·	·	·
Prochlorococcus sp. SCGC AC 669 J20	2626541511	AMZ IB	·	+	+	·	·	+	+	+	+	+	·	+	+	·	·	·
Prochlorococcus sp. SCGC AC 669 J22	2626541512	AMZ IB	·	+	+	+	·	+	·	+	·	+	+	·	·	·	·	·
Prochlorococcus sp. SCGC AC 669 J5	2626541514	AMZ IB	·	+	+	+	·	·	·	·	·	+	+	·	·	·	·	·
Prochlorococcus sp. SCGC AC 669 K10	2626541515	AMZ IB	·	·	+	+	·	+	·	+	+	·	+	+	·	·	·	·
Prochlorococcus sp. SCGC AC 669 K18	2626541516	AMZ IA	·	·	+	+	·	+	+	+	+	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 K20	2626541517	AMZ IB	·	·	+	+	+	+	·	·	·	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 K21	2626541518	AMZ IB	·	+	+	+	·	+	+	+	+	+	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 K22	2626541519	AMZ IB	·	·	·	·	·	·	·	·	·	·	·	+	+	·	·	·
Prochlorococcus sp. SCGC AC 669 L2	2626541520	AMZ IA	·	·	+	+	·	+	+	·	·	·	·	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 M10	2626541521	AMZ IB	·	·	·	+	+	·	·	+	·	·	+	·	·	·	·	·
Prochlorococcus sp. SCGC AC 669 M13	2626541522	AMZ IA	+	·	·	+	·	+	·	·	·	·	·	+	·	·	·	·
Prochlorococcus sp. SCGC AC 669 M16	2626541523	AMZ IB	·	·	·	+	+	+	·	+	·	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 M19	2626541524	AMZ IA	·	·	+	+	·	+	·	+	·	·	·	·	·	·	·	·
Prochlorococcus sp. SCGC AC 669 M6	2626541525	AMZ IA	·	·	+	+	+	·	·	·	·	·	+	·	·	·	·	·
Prochlorococcus sp. SCGC AC 669 M7	2626541526	AMZ IA	·	·	·	+	·	+	·	·	·	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 N11	2626541527	AMZ IA	·	·	+	·	·	+	+	+	+	·	·	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 N18	2626541528	AMZ IB	·	·	·	+	+	+	+	+	·	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 N22	2626541529	AMZ IA	·	·	·	+	+	+	+	+	·	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 N23	2626541530	AMZ IB	·	+	+	+	+	·	·	+	·	+	+	+	·	·	·	·
Prochlorococcus sp. SCGC AC 669 N7	2626541531	AMZ IB	·	+	+	+	·	+	·	+	·	+	·	+	·	·	·	·
Prochlorococcus sp. SCGC AC 669 O11	2626541532	AMZ IB	·	·	·	·	·	+	·	+	+	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 O14	2626541533	AMZ IA	·	·	+	+	+	·	+	·	·	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 O17	2626541534	AMZ IB	·	+	+	+	+	·	·	+	·	+	+	+	+	·	·	·
Prochlorococcus sp. SCGC AC 669 P10	2626541535	AMZ IA	·	·	+	·	·	+	·	+	·	·	·	·	·	·	·	·
Prochlorococcus sp. SCGC AC 669 P19	2626541536	AMZ IB	·	·	·	·	+	+	·	+	+	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AC 669 P8	2626541537	AMZ IB	·	·	+	+	·	+	·	+	+	·	+	+	+	+	·	·
Prochlorococcus sp. SCGC AD 598 A14	2716884926	AMZ IB	·	·	·	+	·	+	+	·	·	·	·	·	·	·	·	·
Prochlorococcus sp. SCGC AD 598 A20	2716884927	AMZ IB	·	·	·	·	+	+	+	+	+	·	·	+	+	+	·	·

Prochlorococcus sp. SCGC AG-937-P16	2818991485	AMZ II	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-A04	2818991575	AMZ III	+	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-A22	2818991570	AMZ III	-	-	-	+	-	+	-	+	+	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-B15	2818991568	AMZ III	+	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-B17	2818991567	AMZ III	+	-	-	+	+	-	-	-	+	+	+	+	+	+	-	-	-
Prochlorococcus sp. SCGC AG-937-C02	2818991566	AMZ III	-	-	-	+	-	+	+	-	-	-	-	+	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-C19	2818991564	AMZ III	+	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-D09	2818991559	AMZ III	+	-	-	+	+	+	+	-	-	-	-	-	-	-	-	+	-
Prochlorococcus sp. SCGC AG-937-D11	2818991558	AMZ III	+	-	-	+	+	+	+	-	+	+	+	+	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-D23	2818991553	AMZ III	+	-	-	+	+	+	-	+	-	-	+	-	-	-	-	+	-
Prochlorococcus sp. SCGC AG-937-E20	2818991549	AMZ III	+	-	-	-	+	-	+	-	+	+	+	+	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-F14	2818991546	AMZ III	+	-	-	-	+	-	-	+	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-F20	2818991545	AMZ III	+	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-F21	2818991544	AMZ III	+	+	+	+	+	-	-	-	-	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G08	2818991542	AMZ III	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G11	2818991540	AMZ III	+	-	-	+	+	-	-	-	+	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G14	2818991539	AMZ III	+	-	-	-	+	-	+	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G19	2818991536	AMZ III	+	-	-	+	-	-	-	-	-	-	-	+	+	+	-	-	-
Prochlorococcus sp. SCGC AG-937-G21	2818991535	AMZ III	+	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J05	2818991528	AMZ III	+	-	-	+	+	-	-	-	+	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J08	2818991525	AMZ III	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J11	2818991524	AMZ III	+	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J14	2818991523	AMZ III	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J17	2818991522	AMZ III	+	+	+	+	+	-	-	+	+	+	+	+	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-K11	2818991520	AMZ III	+	-	-	+	+	-	-	-	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-K16	2818991519	AMZ III	+	+	+	+	+	-	-	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-K23	2818991516	AMZ III	+	-	-	+	+	-	-	+	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-L14	2818991515	AMZ III	+	-	-	+	+	-	-	+	+	-	-	+	+	+	-	-	-
Prochlorococcus sp. SCGC AG-937-L20	2818991514	AMZ III	+	+	+	-	+	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-M02	2818991513	AMZ III	+	-	-	-	+	-	+	-	+	-	+	+	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-M20	2818991510	AMZ III	+	-	-	+	+	-	-	-	+	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-M22	2818991509	AMZ III	-	-	-	-	+	-	-	+	+	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N04	2818991508	AMZ III	+	+	+	+	-	-	-	+	-	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N06	2818991507	AMZ III	+	+	+	-	+	-	-	-	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N07	2818991506	AMZ III	+	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N14	2818991503	AMZ III	+	-	+	-	+	-	-	+	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N15	2818991502	AMZ III	-	-	-	-	-	+	+	-	-	+	+	+	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-N16	2818991501	AMZ III	+	-	-	+	+	-	-	-	+	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N19	2818991500	AMZ III	+	-	-	-	+	-	-	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O03	2818991497	AMZ III	+	-	-	-	+	-	-	-	+	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O13	2818991493	AMZ III	+	+	+	-	+	-	-	-	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O22	2818991490	AMZ III	-	+	+	-	-	-	-	+	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P07	2818991488	AMZ III	+	+	+	+	-	-	-	+	+	+	-	-	-	-	-	-	-

Prochlorococcus sp. SCGC AG-937-P08	2818991487	AMZ III	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Prochlorococcus sp. SCGC AG-937-P17	2818991484	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P18	2818991483	AMZ III	+	+	+	-	+	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P19	2818991482	AMZ III	+	-	-	+	+	-	-	-	+	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P23	2818991481	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table S3. Cont.

SAG	IMG	Clade /	K02092	K02093	K02094	K02095	K02096	K02097	K02284	K02285	K02288	K02289	K02290	K02495	K02495	K02575	K03187	K03188
Name	ID	Gene	<i>apcA</i>	<i>apcB</i>	<i>apcC</i>	<i>apcD</i>	<i>apcE</i>	<i>apcF</i>	<i>cpcA</i>	<i>cpcB</i>	<i>cpcE</i>	<i>cpcF</i>	<i>cpcG</i>	<i>hemN2</i>	<i>hemN1</i>	<i>narK</i>	<i>ureE</i>	<i>ureF</i>
Prochlorococcus sp. SCGC AC-669 E6	2626541501	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AC-669 I11	2626541503	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+
Prochlorococcus sp. SCGC AC-669 I15	2626541504	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AC-669 I23	2626541505	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+
Prochlorococcus sp. SCGC AC-669 I4	2626541506	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
Prochlorococcus sp. SCGC AC-669 I9	2626541507	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+
Prochlorococcus sp. SCGC AC-669 J11	2626541509	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+
Prochlorococcus sp. SCGC AC-669 J17	2626541510	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Prochlorococcus sp. SCGC AC-669 J2	2626541513	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J20	2626541511	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	+
Prochlorococcus sp. SCGC AC-669 J22	2626541512	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J5	2626541514	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 K10	2626541515	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 K18	2626541516	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+
Prochlorococcus sp. SCGC AC-669 K20	2626541517	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AC-669 K21	2626541518	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+
Prochlorococcus sp. SCGC AC-669 K22	2626541519	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 L2	2626541520	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AC-669 M10	2626541521	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M13	2626541522	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M16	2626541523	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+
Prochlorococcus sp. SCGC AC-669 M19	2626541524	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M6	2626541525	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M7	2626541526	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+
Prochlorococcus sp. SCGC AC-669 N11	2626541527	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+
Prochlorococcus sp. SCGC AC-669 N18	2626541528	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-
Prochlorococcus sp. SCGC AC-669 N22	2626541529	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AC-669 N23	2626541530	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 N7	2626541531	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 O11	2626541532	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+
Prochlorococcus sp. SCGC AC-669 O14	2626541533	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AC-669 O17	2626541534	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 P10	2626541535	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Prochlorococcus sp. SCGC AC-669 P19	2626541536	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	+

Prochlorococcus sp. SCGC AG-937-O02	2818991498	AMZ II	.	.	.	.	.	+	.	.	.	.	+	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-O08	2818991494	AMZ II	.	.	.	+	.	.	.	.	.	.	+	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-P09	2818991486	AMZ II	+	+	+	+	+	+	.	.	.	.	+	.	.	+	+	+
Prochlorococcus sp. SCGC AG-937-P16	2818991485	AMZ II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-A04	2818991575	AMZ III	.	.	.	.	.	.	.	.	.	+	.	+	+	.	.	.
Prochlorococcus sp. SCGC AG-937-A22	2818991570	AMZ III	.	.	.	.	.	+	+	+	+	+	+	+	.	.	.	.
Prochlorococcus sp. SCGC AG-937-B15	2818991568	AMZ III	.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.
Prochlorococcus sp. SCGC AG-937-B17	2818991567	AMZ III	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	+	+
Prochlorococcus sp. SCGC AG-937-C02	2818991566	AMZ III	.	.	.	.	.	.	.	.	.	.	.	+	.	.	+	+	+
Prochlorococcus sp. SCGC AG-937-C19	2818991564	AMZ III	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.	.
Prochlorococcus sp. SCGC AG-937-D09	2818991559	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-D11	2818991558	AMZ III	.	.	.	.	+	.	.	.	.	.	.	+	+	.	+	+	+
Prochlorococcus sp. SCGC AG-937-D23	2818991553	AMZ III	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-E20	2818991549	AMZ III	.	.	.	.	.	.	.	.	.	.	+	.	+	+	.	+	+
Prochlorococcus sp. SCGC AG-937-F14	2818991546	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.	.
Prochlorococcus sp. SCGC AG-937-F20	2818991545	AMZ III	+	+	.	.	+	.	.	.	.	.	.	+	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-F21	2818991544	AMZ III	.	.	.	.	.	.	.	.	.	.	.	+	.	+	.	.	.
Prochlorococcus sp. SCGC AG-937-G08	2818991542	AMZ III	.	.	.	.	.	+	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-G11	2818991540	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.
Prochlorococcus sp. SCGC AG-937-G14	2818991539	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-G19	2818991536	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	+	+
Prochlorococcus sp. SCGC AG-937-G21	2818991535	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-J05	2818991528	AMZ III	.	.	.	.	+	.	+	+	+	+	+	+	+	.	.	.	.
Prochlorococcus sp. SCGC AG-937-J08	2818991525	AMZ III	.	.	.	.	.	.	+	+	+	+	+	+	+	.	.	.	.
Prochlorococcus sp. SCGC AG-937-J11	2818991524	AMZ III	+	+	.	.	+	+	+	+	+	+	+	+	+	.	.	.	.
Prochlorococcus sp. SCGC AG-937-J14	2818991523	AMZ III	.	.	.	.	.	.	+	.	.	.	.	+	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-J17	2818991522	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	+	+
Prochlorococcus sp. SCGC AG-937-K11	2818991520	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.
Prochlorococcus sp. SCGC AG-937-K16	2818991519	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.	.	.
Prochlorococcus sp. SCGC AG-937-K23	2818991516	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.	.
Prochlorococcus sp. SCGC AG-937-L14	2818991515	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+
Prochlorococcus sp. SCGC AG-937-L20	2818991514	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-M02	2818991513	AMZ III	.	.	.	.	+	.	+	.	.	.	.	.	.	+	+	.	+	+
Prochlorococcus sp. SCGC AG-937-M20	2818991510	AMZ III	+	+	.	.	.	+	.	.	.	.	.	.	.	+	+	+	.	.
Prochlorococcus sp. SCGC AG-937-M22	2818991509	AMZ III	+	+	.	.	.	+	.	+	+	+	+	+	+	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-N04	2818991508	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.
Prochlorococcus sp. SCGC AG-937-N06	2818991507	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-N07	2818991506	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-N14	2818991503	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-N15	2818991502	AMZ III	+	+	+
Prochlorococcus sp. SCGC AG-937-N16	2818991501	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG-937-N19	2818991500	AMZ III	+	+	.	.	.	+	.	.	.	.	.	.	.	+	+	+	.	.
Prochlorococcus sp. SCGC AG-937-O03	2818991497	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Prochlorococcus sp. SCGC AG-937-O13	2818991493	AMZ III	+	+	-	-	+	-	-	-	+	-	+	+	-	-	-
Prochlorococcus sp. SCGC AG-937-O22	2818991490	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P07	2818991488	AMZ III	-	-	-	-	-	-	+	+	+	+	+	+	-	-	-
Prochlorococcus sp. SCGC AG-937-P08	2818991487	AMZ III	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-
Prochlorococcus sp. SCGC AG-937-P17	2818991484	AMZ III	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P18	2818991483	AMZ III	+	+	-	-	+	-	-	-	-	-	-	-	+	-	-
Prochlorococcus sp. SCGC AG-937-P19	2818991482	AMZ III	-	-	-	-	+	-	+	+	+	+	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-P23	2818991481	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table S3. Cont.

SAG	IMG	Clade/	K03189	K03292	K03635	K03636	K03637	K03638	K03639	K03737	K03750	K03752	K03777	K04035	K04035	K04035	K05376
Name	ID	Gene	<i>ureG</i>	<i>melB</i>	<i>moaE</i>	<i>moaD</i>	<i>moaC</i>	<i>moaB</i>	<i>moaA</i>	<i>pfor</i>	<i>moaE</i>	<i>mobA</i>	<i>dld</i>	<i>acsF1</i>	<i>acsF2</i>	<i>acsF2*</i>	<i>cpeA/mpeA</i>
Prochlorococcus sp. SCGC AC-669 E6	2626541501	AMZ IA	+	-	+	+	+	+	+	+	+	+	-	-	-	-	+
Prochlorococcus sp. SCGC AC-669 I11	2626541503	AMZ IB	+	-	+	+	-	+	+	+	+	+	-	+	-	-	+
Prochlorococcus sp. SCGC AC-669 I15	2626541504	AMZ IA	+	-	+	+	+	+	+	+	+	+	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 I23	2626541505	AMZ IB	-	+	+	+	+	+	-	+	+	-	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 I4	2626541506	AMZ IB	+	-	-	-	-	-	-	+	-	-	-	+	-	-	+
Prochlorococcus sp. SCGC AC-669 I9	2626541507	AMZ IB	+	-	-	-	-	-	+	+	-	+	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 J11	2626541509	AMZ IB	+	-	-	-	+	-	+	+	+	+	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 J17	2626541510	AMZ IB	-	+	-	-	-	-	-	+	-	-	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 J2	2626541513	AMZ IB	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J20	2626541511	AMZ IB	+	-	+	+	+	+	+	+	+	-	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 J22	2626541512	AMZ IB	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+
Prochlorococcus sp. SCGC AC-669 J5	2626541514	AMZ IB	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 K10	2626541515	AMZ IB	-	-	-	-	-	-	-	+	-	-	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 K18	2626541516	AMZ IA	+	-	+	+	+	+	+	-	+	+	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 K20	2626541517	AMZ IB	+	-	-	-	-	+	+	+	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 K21	2626541518	AMZ IB	+	+	+	+	+	+	+	+	+	+	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 K22	2626541519	AMZ IB	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 L2	2626541520	AMZ IA	+	-	+	+	+	+	+	-	+	+	+	+	-	-	-
Prochlorococcus sp. SCGC AC-669 M10	2626541521	AMZ IB	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+
Prochlorococcus sp. SCGC AC-669 M13	2626541522	AMZ IA	-	-	+	+	-	+	-	+	+	-	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M16	2626541523	AMZ IB	+	-	-	-	-	+	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M19	2626541524	AMZ IA	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+
Prochlorococcus sp. SCGC AC-669 M6	2626541525	AMZ IA	-	-	-	-	-	-	-	+	-	-	+	+	-	-	+
Prochlorococcus sp. SCGC AC-669 M7	2626541526	AMZ IA	+	-	-	-	-	+	+	+	-	+	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 N11	2626541527	AMZ IA	+	-	+	+	+	+	+	-	+	+	-	+	+	-	+
Prochlorococcus sp. SCGC AC-669 N18	2626541528	AMZ IB	-	-	+	+	+	+	+	-	+	+	-	-	-	-	+
Prochlorococcus sp. SCGC AC-669 N22	2626541529	AMZ IA	+	-	+	+	+	+	+	+	+	+	+	-	-	-	+
Prochlorococcus sp. SCGC AC-669 N23	2626541530	AMZ IB	-	+	-	-	-	-	-	+	-	-	-	-	-	-	+
Prochlorococcus sp. SCGC AC-669 N7	2626541531	AMZ IB	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 O11	2626541532	AMZ IB	+	-	-	-	-	-	+	+	-	+	-	+	-	-	+
Prochlorococcus sp. SCGC AC-669 O14	2626541533	AMZ IA	+	-	-	-	-	+	+	+	-	+	-	-	-	-	-

Prochlorococcus sp. SCGC AG-937-J20	2818991521	AMZ II	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-M18	2818991511	AMZ II	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-N23	2818991499	AMZ II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O02	2818991498	AMZ II	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O08	2818991494	AMZ II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P09	2818991486	AMZ II	+	-	+	+	+	+	+	+	+	+	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-P16	2818991485	AMZ II	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-A04	2818991575	AMZ III	-	+	-	-	-	-	-	+	-	-	-	+	+	+	+
Prochlorococcus sp. SCGC AG-937-A22	2818991570	AMZ III	-	+	-	-	-	+	-	-	-	-	-	+	+	-	+
Prochlorococcus sp. SCGC AG-937-B15	2818991568	AMZ III	-	+	+	+	-	+	-	+	+	-	-	+	+	+	+
Prochlorococcus sp. SCGC AG-937-B17	2818991567	AMZ III	+	+	-	-	-	-	+	-	-	+	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-C02	2818991566	AMZ III	+	+	+	+	+	+	+	-	+	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-C19	2818991564	AMZ III	-	-	-	-	-	-	-	+	-	-	-	+	+	+	-
Prochlorococcus sp. SCGC AG-937-D09	2818991559	AMZ III	-	-	+	+	+	+	-	+	+	-	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-D11	2818991558	AMZ III	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-D23	2818991553	AMZ III	-	+	+	+	+	+	-	+	+	-	-	+	+	-	-
Prochlorococcus sp. SCGC AG-937-E20	2818991549	AMZ III	+	+	-	-	-	-	+	-	-	+	-	+	+	+	-
Prochlorococcus sp. SCGC AG-937-F14	2818991546	AMZ III	-	-	-	-	-	-	-	+	-	-	-	+	+	-	+
Prochlorococcus sp. SCGC AG-937-F20	2818991545	AMZ III	-	+	-	-	-	-	-	-	-	-	-	+	+	-	-
Prochlorococcus sp. SCGC AG-937-F21	2818991544	AMZ III	-	+	-	-	-	-	-	-	-	-	-	+	+	-	-
Prochlorococcus sp. SCGC AG-937-G08	2818991542	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G11	2818991540	AMZ III	-	-	-	-	-	-	-	-	-	-	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-G14	2818991539	AMZ III	-	-	-	-	-	-	-	+	-	-	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-G19	2818991536	AMZ III	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G21	2818991535	AMZ III	-	-	-	-	-	-	-	-	-	-	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-J05	2818991528	AMZ III	-	+	-	-	-	-	-	-	-	-	+	+	+	+	+
Prochlorococcus sp. SCGC AG-937-J08	2818991525	AMZ III	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+
Prochlorococcus sp. SCGC AG-937-J11	2818991524	AMZ III	-	+	-	-	-	-	-	+	-	-	-	+	+	+	+
Prochlorococcus sp. SCGC AG-937-J14	2818991523	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J17	2818991522	AMZ III	+	+	-	-	-	-	-	+	-	+	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-K11	2818991520	AMZ III	-	+	-	-	-	-	-	+	-	-	-	+	+	+	+
Prochlorococcus sp. SCGC AG-937-K16	2818991519	AMZ III	-	+	-	-	-	-	-	+	-	-	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-K23	2818991516	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+
Prochlorococcus sp. SCGC AG-937-L14	2818991515	AMZ III	+	+	-	-	-	-	+	+	-	+	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-L20	2818991514	AMZ III	-	+	-	-	-	-	-	+	-	-	-	+	+	-	+
Prochlorococcus sp. SCGC AG-937-M02	2818991513	AMZ III	+	+	-	-	+	-	+	-	-	+	-	+	+	+	-
Prochlorococcus sp. SCGC AG-937-M20	2818991510	AMZ III	-	+	-	-	-	-	-	-	-	-	-	+	+	-	-
Prochlorococcus sp. SCGC AG-937-M22	2818991509	AMZ III	-	-	-	-	-	-	-	+	-	-	-	+	+	-	+
Prochlorococcus sp. SCGC AG-937-N04	2818991508	AMZ III	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N06	2818991507	AMZ III	-	-	-	-	-	-	-	+	-	-	-	+	+	+	+
Prochlorococcus sp. SCGC AG-937-N07	2818991506	AMZ III	-	+	-	-	-	-	-	+	-	-	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-N14	2818991503	AMZ III	-	-	-	-	-	-	-	+	-	-	+	+	+	-	-
Prochlorococcus sp. SCGC AG-937-N15	2818991502	AMZ III	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-

Prochlorococcus sp. SCGC AG-937-N16	2818991501	AMZ III	-	+	-	-	-	-	-	-	-	-	-	+	+	-	-
Prochlorococcus sp. SCGC AG-937-N19	2818991500	AMZ III	-	+	-	-	-	-	-	+	-	-	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-O03	2818991497	AMZ III	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-
Prochlorococcus sp. SCGC AG-937-O13	2818991493	AMZ III	-	-	-	-	-	-	-	+	-	-	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-O22	2818991490	AMZ III	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P07	2818991488	AMZ III	-	-	-	-	-	-	-	-	-	-	+	+	+	-	+
Prochlorococcus sp. SCGC AG-937-P08	2818991487	AMZ III	-	+	+	+	+	+	+	+	+	+	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-P17	2818991484	AMZ III	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P18	2818991483	AMZ III	-	+	-	-	-	-	-	-	-	-	+	-	-	-	+
Prochlorococcus sp. SCGC AG-937-P19	2818991482	AMZ III	-	+	-	-	-	-	-	+	-	-	+	+	+	+	-
Prochlorococcus sp. SCGC AG-937-P23	2818991481	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* A second copy of *acsF₂* was found.

Table S3. Cont.

Genome name	IMG ID	Clade/Fx Gene	K05377 <i>cpeB/mpeB</i>	K05378 <i>cpeC</i>	K05379 <i>cpeD</i>	K05381 <i>cpeR</i>	K05382 <i>cpeS</i>	K05383 <i>cpeT</i>	K05384 <i>cpeU/mpeU</i>	K05385 <i>cpeY</i>	K05386 <i>cpeZ</i>	K05601 <i>hcp</i>	K06444 <i>crtL2</i>	K07322 <i>yfE, scdA</i>	K08479 <i>sasA</i>	K08480 <i>kaiA</i>	K08481 <i>kaiB</i>	K08482 <i>kaiC</i>
Prochlorococcus sp. SCGC AC-669 E6	2626541501	AMZ IA	+	-	-	-	+	+	+	+	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 I11	2626541503	AMZ IB	+	-	-	-	+	+	+	+	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 I15	2626541504	AMZ IA	-	-	-	-	+	+	-	+	-	-	-	-	+	-	-	-
Prochlorococcus sp. SCGC AC-669 I23	2626541505	AMZ IB	+	-	-	-	+	+	+	+	+	+	+	+	-	-	+	+
Prochlorococcus sp. SCGC AC-669 I4	2626541506	AMZ IB	+	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 I9	2626541507	AMZ IB	+	-	-	-	+	+	+	+	+	+	+	+	+	-	-	-
Prochlorococcus sp. SCGC AC-669 J11	2626541509	AMZ IB	+	-	-	-	+	+	+	+	+	+	+	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J17	2626541510	AMZ IB	+	-	-	-	+	+	+	+	+	-	-	-	+	-	-	-
Prochlorococcus sp. SCGC AC-669 J2	2626541513	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J20	2626541511	AMZ IB	+	-	-	-	+	+	+	+	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J22	2626541512	AMZ IB	+	-	-	-	+	+	+	+	+	+	+	+	+	-	+	+
Prochlorococcus sp. SCGC AC-669 J5	2626541514	AMZ IB	-	-	-	-	-	-	-	-	-	+	+	+	+	-	-	-
Prochlorococcus sp. SCGC AC-669 K10	2626541515	AMZ IB	+	-	-	-	+	+	+	+	+	+	+	+	-	-	+	+
Prochlorococcus sp. SCGC AC-669 K18	2626541516	AMZ IA	+	-	-	-	+	+	+	+	+	+	+	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 K20	2626541517	AMZ IB	-	-	-	-	-	-	-	-	-	+	+	+	+	-	+	+
Prochlorococcus sp. SCGC AC-669 K21	2626541518	AMZ IB	+	-	-	-	+	+	+	+	+	+	+	+	-	-	+	+
Prochlorococcus sp. SCGC AC-669 K22	2626541519	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Prochlorococcus sp. SCGC AC-669 L2	2626541520	AMZ IA	-	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M10	2626541521	AMZ IB	-	-	-	-	-	-	+	-	+	-	+	-	+	-	-	-
Prochlorococcus sp. SCGC AC-669 M13	2626541522	AMZ IA	-	-	-	-	-	-	-	-	-	+	+	+	-	-	+	+
Prochlorococcus sp. SCGC AC-669 M16	2626541523	AMZ IB	-	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M19	2626541524	AMZ IA	+	-	-	-	+	+	+	+	+	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M6	2626541525	AMZ IA	+	-	-	-	+	+	+	+	+	+	+	+	+	-	-	-
Prochlorococcus sp. SCGC AC-669 M7	2626541526	AMZ IA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	+
Prochlorococcus sp. SCGC AC-669 N11	2626541527	AMZ IA	+	-	-	-	+	+	+	+	+	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 N18	2626541528	AMZ IB	+	-	-	-	+	+	+	+	+	-	+	-	-	-	-	-

Prochlorococcus sp. SCGC AC 669 N22	2626541529	AMZ IA	+	-	-	-	-	+	+	+	+	-	+	-	-	-	-
Prochlorococcus sp. SCGC AC 669 N23	2626541530	AMZ IB	+	-	-	-	-	-	+	+	+	+	-	+	-	-	-
Prochlorococcus sp. SCGC AC 669 N7	2626541531	AMZ IB	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-
Prochlorococcus sp. SCGC AC 669 O11	2626541532	AMZ IB	+	-	-	-	+	+	+	+	+	-	+	-	+	-	+
Prochlorococcus sp. SCGC AC 669 O14	2626541533	AMZ IA	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
Prochlorococcus sp. SCGC AC 669 O17	2626541534	AMZ IB	+	-	-	-	+	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC 669 P10	2626541535	AMZ IA	+	-	-	-	+	+	+	+	+	-	-	-	+	-	-
Prochlorococcus sp. SCGC AC 669 P19	2626541536	AMZ IB	+	-	-	-	-	-	-	+	-	-	-	-	-	-	+
Prochlorococcus sp. SCGC AC 669 P8	2626541537	AMZ IB	+	-	-	-	+	+	+	+	+	-	+	-	-	-	-
Prochlorococcus sp. SCGC AD 598 A14	2716884926	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+
Prochlorococcus sp. SCGC AD 598 A20	2716884927	AMZ IB	+	-	-	-	+	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 B06	2718217658	AMZ IA	-	-	-	-	-	-	-	-	-	+	-	+	-	-	+
Prochlorococcus sp. SCGC AD 598 C06	2718217657	AMZ IB	+	-	-	-	+	+	+	+	+	-	-	-	-	-	+
Prochlorococcus sp. SCGC AD 598 D04	2724679665	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 D21	2724679666	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 D22	2724679668	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 E21	2724679669	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 F05	2724679671	AMZ IB	+	-	-	-	+	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 I02	2724679674	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
Prochlorococcus sp. SCGC AD 598 I13	2724679675	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 K13	2724679676	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 L02	2724679678	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 N22	2724679679	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 P08	2724679680	AMZ IA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 598 P19	2724679681	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 858 C19	2724679684	AMZ II	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-
Prochlorococcus sp. SCGC AD 858 D07	2724679692	AMZ II	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AD 858 F19	2724679753	AMZ II	-	+	-	-	-	-	-	-	-	+	-	+	-	-	-
Prochlorococcus sp. SCGC AD 858 I04	2724679758	AMZ II	-	+	-	-	-	-	-	-	-	+	-	+	-	-	-
Prochlorococcus sp. SCGC AD 858 J10	2724679760	AMZ II	-	-	-	-	-	-	-	-	-	+	-	+	+	-	-
Prochlorococcus sp. SCGC AD 858 N09	2724679773	AMZ II	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-
Prochlorococcus sp. SCGC AD 858 P02	2724679775	AMZ II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG 937 A15	2818991573	AMZ II	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-
Prochlorococcus sp. SCGC AG 937 A16	2818991572	AMZ II	-	-	-	-	-	-	-	-	-	+	-	+	+	+	+
Prochlorococcus sp. SCGC AG 937 A21	2818991571	AMZ II	-	-	-	-	-	-	-	-	-	+	+	+	-	-	+
Prochlorococcus sp. SCGC AG 937 C04	2818991565	AMZ II	+	+	-	+	+	+	+	+	+	-	+	+	-	+	+
Prochlorococcus sp. SCGC AG 937 D03	2818991563	AMZ II	+	-	-	+	+	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG 937 D07	2818991561	AMZ II	+	+	+	-	+	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AG 937 D14	2818991557	AMZ II	-	+	-	-	-	-	-	-	-	+	+	+	-	-	-
Prochlorococcus sp. SCGC AG 937 D18	2818991555	AMZ II	+	+	-	-	-	-	-	-	-	+	+	+	+	-	-
Prochlorococcus sp. SCGC AG 937 E05	2818991551	AMZ II	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG 937 F06	2818991547	AMZ II	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG 937 G10	2818991541	AMZ II	-	-	-	+	+	+	+	+	+	-	-	-	-	-	-

Prochlorococcus sp. SCGC AG-937-I04	2818991533	AMZ II	-	+	-	-	-	-	-	-	+	-	+	+	+	+	+
Prochlorococcus sp. SCGC AG-937-I23	2818991530	AMZ II	-	+	-	-	-	-	-	-	+	+	+	+	-	-	-
Prochlorococcus sp. SCGC AG-937-J02	2818991529	AMZ II	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J06	2818991527	AMZ II	+	+	+	+	+	+	+	+	+	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J07	2818991526	AMZ II	+	+	+	+	+	+	+	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J20	2818991521	AMZ II	-	+	-	-	-	-	-	-	+	-	+	-	+	+	+
Prochlorococcus sp. SCGC AG-937-M18	2818991511	AMZ II	-	+	-	-	-	-	-	-	+	+	+	+	+	+	+
Prochlorococcus sp. SCGC AG-937-N23	2818991499	AMZ II	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AG-937-O02	2818991498	AMZ II	-	+	-	-	-	-	-	-	+	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O08	2818991494	AMZ II	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P09	2818991486	AMZ II	-	-	-	-	-	-	-	-	+	-	+	-	+	+	+
Prochlorococcus sp. SCGC AG-937-P16	2818991485	AMZ II	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+
Prochlorococcus sp. SCGC AG-937-A04	2818991575	AMZ III	+	+	-	-	-	+	+	+	+	+	-	+	-	-	-
Prochlorococcus sp. SCGC AG-937-A22	2818991570	AMZ III	+	+	+	+	+	+	+	+	+	-	-	-	+	-	-
Prochlorococcus sp. SCGC AG-937-B15	2818991568	AMZ III	+	+	+	-	+	+	+	+	-	+	-	-	+	+	+
Prochlorococcus sp. SCGC AG-937-B17	2818991567	AMZ III	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-C02	2818991566	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-C19	2818991564	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AG-937-D09	2818991559	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
Prochlorococcus sp. SCGC AG-937-D11	2818991558	AMZ III	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-D23	2818991553	AMZ III	-	+	-	-	-	-	-	-	+	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-E20	2818991549	AMZ III	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-F14	2818991546	AMZ III	+	+	-	-	-	+	+	+	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-F20	2818991545	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-F21	2818991544	AMZ III	-	+	-	-	-	-	-	-	+	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G08	2818991542	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G11	2818991540	AMZ III	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-G14	2818991539	AMZ III	-	-	-	-	-	-	-	-	+	+	-	+	-	-	-
Prochlorococcus sp. SCGC AG-937-G19	2818991536	AMZ III	-	-	-	-	-	-	-	-	-	+	-	+	+	+	+
Prochlorococcus sp. SCGC AG-937-G21	2818991535	AMZ III	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J05	2818991528	AMZ III	+	+	+	+	+	+	+	+	+	-	-	+	-	-	-
Prochlorococcus sp. SCGC AG-937-J08	2818991525	AMZ III	+	+	+	-	+	+	+	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J11	2818991524	AMZ III	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+
Prochlorococcus sp. SCGC AG-937-J14	2818991523	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-J17	2818991522	AMZ III	-	-	-	-	-	-	-	-	+	-	-	-	+	+	+
Prochlorococcus sp. SCGC AG-937-K11	2818991520	AMZ III	+	+	-	+	+	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-K16	2818991519	AMZ III	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-K23	2818991516	AMZ III	+	+	+	+	+	+	+	+	-	+	-	+	-	-	-
Prochlorococcus sp. SCGC AG-937-L14	2818991515	AMZ III	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-L20	2818991514	AMZ III	+	+	-	-	+	+	+	+	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-M02	2818991513	AMZ III	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-M20	2818991510	AMZ III	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-M22	2818991509	AMZ III	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-

Prochlorococcus sp. SCGC AG-937-N04	2818991508	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N06	2818991507	AMZ III	+	+	+	-	+	+	+	+	+	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N07	2818991506	AMZ III	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-
Prochlorococcus sp. SCGC AG-937-N14	2818991503	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N15	2818991502	AMZ III	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Prochlorococcus sp. SCGC AG-937-N16	2818991501	AMZ III	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-N19	2818991500	AMZ III	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O03	2818991497	AMZ III	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O13	2818991493	AMZ III	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-O22	2818991490	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P07	2818991488	AMZ III	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P08	2818991487	AMZ III	-	-	-	-	-	-	-	-	-	+	-	-	-	+	+
Prochlorococcus sp. SCGC AG-937-P17	2818991484	AMZ III	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P18	2818991483	AMZ III	+	+	-	-	+	+	+	+	+	-	+	-	-	-	-
Prochlorococcus sp. SCGC AG-937-P19	2818991482	AMZ III	-	-	-	-	-	-	-	-	-	+	+	-	-	+	+
Prochlorococcus sp. SCGC AG-937-P23	2818991481	AMZ III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table S3. Cont.

SAG	IMG	Clade /	K08918	K08921	K08922	K08923	K08924	K08925	K11959	K11960	K11961	K11962	K11963	pfam14218
Name	ID	Gene	<i>pcbA</i>	<i>isiA</i>	<i>pcbE</i>	<i>pcbF</i>	<i>pcbG</i>	<i>pcbC</i>	<i>urtA</i>	<i>urtB</i>	<i>urtC</i>	<i>urtD</i>	<i>urtE</i>	<i>cop23</i>
Prochlorococcus sp. SCGC AC-669 E6	2626541501	AMZ IA	-	-	-	-	+	-	+	+	+	+	+	-
Prochlorococcus sp. SCGC AC-669 I11	2626541503	AMZ IB	-	-	-	-	-	-	+	+	+	+	+	+
Prochlorococcus sp. SCGC AC-669 I15	2626541504	AMZ IA	-	-	-	-	-	-	+	-	-	-	-	+
Prochlorococcus sp. SCGC AC-669 I23	2626541505	AMZ IB	-	-	-	-	+	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 I4	2626541506	AMZ IB	-	-	-	-	-	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 I9	2626541507	AMZ IB	-	-	-	-	+	-	+	+	+	+	+	-
Prochlorococcus sp. SCGC AC-669 J11	2626541509	AMZ IB	-	-	-	-	+	-	+	+	+	+	+	-
Prochlorococcus sp. SCGC AC-669 J17	2626541510	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J2	2626541513	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J20	2626541511	AMZ IB	-	-	-	-	-	-	+	+	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J22	2626541512	AMZ IB	-	-	-	-	-	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 J5	2626541514	AMZ IB	-	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 K10	2626541515	AMZ IB	-	-	-	-	-	-	+	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 K18	2626541516	AMZ IA	-	-	-	-	-	-	+	-	+	+	+	-
Prochlorococcus sp. SCGC AC-669 K20	2626541517	AMZ IB	-	-	-	-	-	-	+	+	+	+	+	+
Prochlorococcus sp. SCGC AC-669 K21	2626541518	AMZ IB	-	-	-	-	+	-	+	+	+	+	+	-
Prochlorococcus sp. SCGC AC-669 K22	2626541519	AMZ IB	-	-	-	-	-	-	-	-	-	-	+	+
Prochlorococcus sp. SCGC AC-669 L2	2626541520	AMZ IA	-	-	-	-	+	-	+	-	+	+	+	-
Prochlorococcus sp. SCGC AC-669 M10	2626541521	AMZ IB	-	-	-	-	+	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M13	2626541522	AMZ IA	+	-	-	-	-	-	-	-	-	-	-	-
Prochlorococcus sp. SCGC AC-669 M16	2626541523	AMZ IB	+	-	-	-	+	-	+	+	+	+	+	-
Prochlorococcus sp. SCGC AC-669 M19	2626541524	AMZ IA	+	-	-	-	-	-	-	-	-	-	-	-

Prochlorococcus sp. SCGC AC 669 M6	2626541525	AMZ IA	+	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AC 669 M7	2626541526	AMZ IA	+	.	.	.	+	.	+	+	+	+	+	.
Prochlorococcus sp. SCGC AC 669 N11	2626541527	AMZ IA	.	.	.	.	.	.	+	+	+	+	+	.
Prochlorococcus sp. SCGC AC 669 N18	2626541528	AMZ IB	+	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AC 669 N22	2626541529	AMZ IA	.	.	.	.	.	.	+	.	.	.	.	+
Prochlorococcus sp. SCGC AC 669 N23	2626541530	AMZ IB	.	.	.	.	+	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AC 669 N7	2626541531	AMZ IB	+	.	.	.	+	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AC 669 O11	2626541532	AMZ IB	.	.	.	.	+	.	+	+	+	+	+	+
Prochlorococcus sp. SCGC AC 669 O14	2626541533	AMZ IA	.	.	.	.	.	.	+	+	+	+	+	.
Prochlorococcus sp. SCGC AC 669 O17	2626541534	AMZ IB	.	.	.	.	+	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AC 669 P10	2626541535	AMZ IA	.	.	.	.	+	.	.	.	.	.	.	+
Prochlorococcus sp. SCGC AC 669 P19	2626541536	AMZ IB	.	.	.	.	+	.	+	+	+	+	+	.
Prochlorococcus sp. SCGC AC 669 P8	2626541537	AMZ IB	.	.	.	.	.	.	+	+	+	+	+	.
Prochlorococcus sp. SCGC AD 598 A14	2716884926	AMZ IB	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 A20	2716884927	AMZ IB	.	.	.	.	+	.	+	+	.	.	.	+
Prochlorococcus sp. SCGC AD 598 B06	2718217658	AMZ IA	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 C06	2718217657	AMZ IB	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 D04	2724679665	AMZ IB	+	.	.	.	+	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 D21	2724679666	AMZ IB	.	.	.	.	+	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 D22	2724679668	AMZ IB	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 E21	2724679669	AMZ IA	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 F05	2724679671	AMZ IB	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 I02	2724679674	AMZ IB	.	.	.	.	+	.	+	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 I13	2724679675	AMZ IA	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 K13	2724679676	AMZ IB	.	.	.	.	.	.	.	.	.	.	.	+
Prochlorococcus sp. SCGC AD 598 L02	2724679678	AMZ IB	.	.	.	.	.	.	.	.	.	.	.	+
Prochlorococcus sp. SCGC AD 598 N22	2724679679	AMZ IB	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 P08	2724679680	AMZ IA	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 598 P19	2724679681	AMZ IB	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 858 C19	2724679684	AMZ II	.	+	.	.	.	.	.	.	.	.	.	+
Prochlorococcus sp. SCGC AD 858 D07	2724679692	AMZ II	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 858 F19	2724679753	AMZ II	.	+	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 858 I04	2724679758	AMZ II	.	+	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 858 J10	2724679760	AMZ II	.	.	.	.	.	.	.	.	.	.	.	+
Prochlorococcus sp. SCGC AD 858 N09	2724679773	AMZ II	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AD 858 P02	2724679775	AMZ II	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937 A15	2818991573	AMZ II	.	.	.	.	.	.	+	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937 A16	2818991572	AMZ II	.	+	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937 A21	2818991571	AMZ II	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937 C04	2818991565	AMZ II	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937 D03	2818991563	AMZ II	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937 D07	2818991561	AMZ II	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937 D14	2818991557	AMZ II	.	+	.	.	.	.	.	.	.	.	.	.

Prochlorococcus sp. SCGC AG 937-L20	2818991514	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-M02	2818991513	AMZ III	.	.	.	.	.	+	+	+	+	+	.	.
Prochlorococcus sp. SCGC AG 937-M20	2818991510	AMZ III	.	+	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-M22	2818991509	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-N04	2818991508	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-N06	2818991507	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-N07	2818991506	AMZ III	.	+	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-N14	2818991503	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-N15	2818991502	AMZ III	.	.	.	.	.	+	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-N16	2818991501	AMZ III	.	+	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-N19	2818991500	AMZ III	.	+	.	.	.	.	.	.	.	.	+	.
Prochlorococcus sp. SCGC AG 937-O03	2818991497	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-O13	2818991493	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-O22	2818991490	AMZ III	.	.	.	.	.	.	.	.	.	+	+	.
Prochlorococcus sp. SCGC AG 937-P07	2818991488	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-P08	2818991487	AMZ III	.	+	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-P17	2818991484	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-P18	2818991483	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-P19	2818991482	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.
Prochlorococcus sp. SCGC AG 937-P23	2818991481	AMZ III	.	.	.	.	.	.	.	.	.	.	.	.

Table S4. High-performance liquid chromatography (HPLC) photosynthetic pigments at a selected depth in AMZ waters during cruise MV1015. Data downloaded from the C-MORE BiG-RAPA Database (https://hahana.soest.hawaii.edu/cmoreserver/cruises/big_rapa/).

Station	Depth (m)	CHLDA (ng/L)	CHLC (ng/L)	PER (ng/L)	BUT (ng/L)	FUCO (ng/L)	HEX (ng/L)	PRAS (ng/L)	VIOLA (ng/L)	DDX (ng/L)	ALLOX (ng/L)	DTX (ng/L)	LUT (ng/L)	ZEAX (ng/L)	CHLB (ng/L)	A-CAR (ng/L)	B-CAR (ng/L)	DV-CHLA (ng/L)	MV-CHLA (ng/L)	TOTCHLA (ng/L)
1	65	0.0	19.1	0.0	0.0	16.0	12.6	0.0	0.4	1.2	0.0	0.0	0.0	22.8	86.5	55.3	0.0	52.7	30.4	83.1

Pigment abbreviations: CHLDA = chlorophyllide *a*, CHLC = chlorophyll *c*, PER = peridinin, BUT = 19'-butanoyloxyfucoxanthin, FUCO = fucoxanthin, HEX = 19'-hexanoyloxyfucoxanthin, PRAS = prasinoxanthin, VIOLA = violaxanthin, DDX = diadinoxanthin, ALLOX = alloxanthin, DTX = diatoxanthin, LUT = lutein, ZEAX = zeaxanthin, CHLB = chlorophyll *b*, A-CAR = α -carotene, B-CAR = β -carotene, DV-CHLA = divinyl chlorophyll *a*, MV-CHLA = mono-vinyl chlorophyll *a*, TOTCHLA = total chlorophyll *a*.

Table S5. Metagenomes and metatranscriptomes used in fragment recruitment (Fig. S7) and metatranscriptomic analysis (Fig. 8).

Accession	Data Repository	Metagenome/Metatranscriptome Name	Specific Ecosystem	Region	Latitude	Longitude	Depth (m)	O ₂ (μmol/kg)	NO ₂ ⁻ (μmol/kg)	NO ₃ ⁻ (μmol/kg)	PO ₄ ⁻³ (μmol/kg)	Temp (°C)	Salinity	Seq. Platform	Total quality filtered reads	Reference / Contact
SRX648500	NCBI SRA	OMZoMBIE_2013_St10_30m_D	Eastern-Tropical North Pacific AMZ	ETNP	18.800	-104.7	30	205.1	0.00	0.00	0.00	26.22	34.68	Illumi MiSeq		Ganesh et al. ISME J. 2015 Apr 7. doi: 10.1038/ismej.2015.44.
SRX648501	NCBI SRA	OMZoMBIE_2013_St10_85m_D	Eastern-Tropical North Pacific AMZ	ETNP	18.800	-104.7	85	3.7	20.86	0.11	2.75	15.5	34.65	Illumi MiSeq	1903315	Ganesh et al. ISME J. 2015 Apr 7. doi: 10.1038/ismej.2015.44.
SRX648502	NCBI SRA	OMZoMBIE_2013_St10_125m_D	Eastern-Tropical North Pacific AMZ	ETNP	18.800	-104.7	125	1.4	16.39	4.75	2.75	12.86	34.77	Illumi MiSeq	1342105	Ganesh et al. ISME J. 2015 Apr 7. doi: 10.1038/ismej.2015.44.
SRX648440	NCBI SRA	OMZoMBIE_2013_St6_30m_D	Eastern-Tropical North Pacific AMZ	ETNP	18.900	-104.5	30	215.9	3.28	0.42	0.98	25.7	34.69	Illumi MiSeq		Ganesh et al. ISME J. 2015 Apr 7. doi: 10.1038/ismej.2015.44.
SRX648442	NCBI SRA	OMZoMBIE_2013_St6_85m_D	Eastern-Tropical North Pacific AMZ	ETNP	18.900	-104.5	85	1.7	22.44	0.07	2.57	14.9	34.72	Illumi MiSeq	2305477	Ganesh et al. ISME J. 2015 Apr 7. doi: 10.1038/ismej.2015.44.
SRX648443	NCBI SRA	OMZoMBIE_2013_St6_100m_D	Eastern-Tropical North Pacific AMZ	ETNP	18.900	-104.5	100	1.5	16.25	4.19	2.52	13.99	34.78	Illumi MiSeq	1396799	Ganesh et al. ISME J. 2015 Apr 7. doi: 10.1038/ismej.2015.44.
SRX3036145	NCBI SRA	NH1315-St6-100m	Eastern-Tropical North Pacific AMZ	ETNP	18.900	-104.5	100	1.5	16.25	4.19	2.52	13.99	34.78	Illumi MiSeq	5494798	Plominsky et al. Environmental microbiology. 2018 Aug;20(8):2727-42.
SRX648444	NCBI SRA	OMZoMBIE_2013_St6_125m_D	Eastern-Tropical North Pacific AMZ	ETNP	18.900	-104.5	125	1.8	15.48	6.06	2.55	13.36	34.8	Illumi MiSeq		Ganesh et al. ISME J. 2015 Apr 7. doi: 10.1038/ismej.2015.44.
SRX3036140	NCBI SRA	Galathea_G14.100_60m	Eastern-Tropical South Pacific AMZ	ETSP	-12.444	-77.616	60	0.0		1.00				454-pyrosequencing	1143183	Astorga-Eló et al. ISME J. 2015 May;9(5):1264-7.
SRX080938	NCBI SRA	MOOMZ1_65m_D	Eastern-Tropical South Pacific AMZ	ETSP	-20.117	-70.383	65	40.0	15.00	0.00				454-pyrosequencing	330057	Stewart et al. Environ Microbiol. 2012 Jan;14(1):23-40.
SRX025908	NCBI SRA	MOOMZ1_85m_D	Eastern-Tropical South Pacific AMZ	ETSP	-20.117	-70.383	85	10.0	14.00	2.00				454-pyrosequencing	476329	Stewart et al. Environ Microbiol. 2012 Jan;14(1):23-40.
SRX029170	NCBI SRA	MOOMZ2_70m_D	Eastern-Tropical South Pacific AMZ	ETSP	-20.117	-70.383	70	25.0						454-pyrosequencing	354902	Stewart et al. Environ Microbiol. 2012 Jan;14(1):23-40.
SRX080956	NCBI SRA	MOOMZ3_50m_D	Eastern-Tropical South Pacific AMZ	ETSP	-20.117	-70.383	50	16.3	16.21	0.04	2.84		34.82	454-pyrosequencing	566738	Canfield et al. Science. 2010 Dec 3;330(6009):1375-1378.
SRX029172	NCBI SRA	MOOMZ3_80m_D	Eastern-Tropical South Pacific AMZ	ETSP	-20.117	-70.383	80	0.0	15.21	4.37	3.00		34.91	454-pyrosequencing	693522	De Brabandere L, Canfield DE, Dalsgaard T, Friederich GE, Revsbech NP, Ulloa O, Thamdrup B (2014) Environ Microbiol. 2014 Oct;16(10):3041-54.
SAMEA2619935	European Nucleotide Archive	TARA_036_SRF_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	20.818	63.505	5.5	210.9	0.08	0.05	0.37	25.6	36.5	HiSeq-Illumi	19877627	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620004	European Nucleotide Archive	TARA_038_SRF_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	19.039	64.491	5.5	199.9	0.05	0.01	0.32	26.2	36.6	HiSeq-Illumi	29453475	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620081	European Nucleotide Archive	TARA_039_DCM_0.22-1.6	Indian Ocean [MRGID:1904]	Indian Ocean	18.584	66.473	25.3	193.0	0.07	0.02	0.26	26.8	36.3	HiSeq-Illumi	149652886	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620106	European Nucleotide Archive	TARA_039_MES_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	18.734	66.390	268.2	2.3	19.15	2.07	2.64	15.6	35.9	HiSeq-Illumi	76545865	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620065	European Nucleotide Archive	TARA_039_SRF_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	18.592	66.622	5.4	193.4	0.02	0.01	0.23	26.8	36.3	HiSeq-Illumi	20449163	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620198	European Nucleotide Archive	TARA_041_SRF_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	14.606	69.978	5.5	187.4	0.09	0.00	0.14	29.1	36	HiSeq-Illumi	24745044	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620413	European Nucleotide Archive	TARA_048_SRF_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	-9.392	66.423	5.4	187.3	0.05	0.01	0.08	29.8	34.2	HiSeq-Illumi	82925072	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620651	European Nucleotide Archive	TARA_056_SRF_0.22-3	Indian Ocean [MRGID:1904]	Indian Ocean	-15.342	43.297	5.5	193.1				27.3	35	HiSeq-Illumi	152134585	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373

SAMEA2620672	European Nucleotide Archive	TARA_057_SRF_0.22-3	Indian Ocean [MRGID:1904]	Indian Ocean	-17.025	42.740	5.6	190.1	-0.02	0.02	0.00	27	35.1	HiSeq-Illumi	137899254	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2620734	European Nucleotide Archive	TARA_058_DCM_0.22-3	Indian Ocean [MRGID:1904]	Indian Ocean	-17.286	42.287	67.1	185.0	0.03	0.03	0.00	25.3	35.2	HiSeq-Illumi	150840420	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2620756	European Nucleotide Archive	TARA_062_SRF_0.22-3	Indian Ocean [MRGID:1904]	Indian Ocean	-22.337	40.341	5.4	199.9				25.1	35.3	HiSeq-Illumi	126656804	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2620836	European Nucleotide Archive	TARA_064_DCM_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	-29.533	37.912	63.6	207.4	0.02	0.00	0.08	22.3	35.3	HiSeq-Illumi	51316051	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2620828	European Nucleotide Archive	TARA_064_DCM_0.22-3	Indian Ocean [MRGID:1904]	Indian Ocean	-29.533	37.912	63.6	207.4	0.02	0.00	0.08	22.3	35.3	HiSeq-Illumi	141276880	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2620786	European Nucleotide Archive	TARA_064_SRF_0.22-3	Indian Ocean [MRGID:1904]	Indian Ocean	-29.502	37.989	5.5	210.0	0.00	0.00	0.08	22.2	35.3	HiSeq-Illumi	282205808	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2620894	European Nucleotide Archive	TARA_065_DCM_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	-35.242	26.305	28.7	206.4					21.8	HiSeq-Illumi	81813162	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2620890	European Nucleotide Archive	TARA_065_DCM_0.22-3	Indian Ocean [MRGID:1904]	Indian Ocean	-35.242	26.305	28.7	206.4					21.8	HiSeq-Illumi	196548092	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2620861	European Nucleotide Archive	TARA_065_SRF_0.1-0.22	Indian Ocean [MRGID:1904]	Indian Ocean	-35.173	26.287	5.9	207.0					21.8	35.4	HiSeq-Illumi	79943254	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620855	European Nucleotide Archive	TARA_065_SRF_0.22-3	Indian Ocean [MRGID:1904]	Indian Ocean	-35.173	26.287	5.9	207.0					21.8	35.4	HiSeq-Illumi	107392199	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SRX672316	NCBI SRA	Mediterranean_DCM_JUL2012-LF	Mediterranean Sea	Mediterranean Sea	38.068	-0.232	75							HiSeq-Illumi	6651036	Martin-Cuadrado et al. ISME J. 2015 Jul;9(7):1619-34.	
SRX672099	NCBI SRA	Mediterranean_DCM_JUN2009-LF	Mediterranean Sea	Mediterranean Sea	38.068	-0.232	65							HiSeq-Illumi	32129968	Martin-Cuadrado et al. ISME J. 2015 Jul;9(7):1619-34.	
SRX672291	NCBI SRA	Mediterranean_DCM_SEP2013	Mediterranean Sea	Mediterranean Sea	38.068	-0.232	55							HiSeq-Illumi	52511073	Martin-Cuadrado et al. ISME J. 2015 Jul;9(7):1619-34.	
SRX672326	NCBI SRA	Mediterranean_DCM_SEP2013-LF	Mediterranean Sea	Mediterranean Sea	38.068	-0.232	55							HiSeq-Illumi	37121672	Martin-Cuadrado et al. ISME J. 2015 Jul;9(7):1619-34.	
SAMEA2591074	European Nucleotide Archive	TARA_007_DCM_0.22-1.6	Mediterranean Sea [MRGID:1905]	Mediterranean Sea	37.054	1.948	41.7		0.03	0.00	0.01	17.4		HiSeq-Illumi	54648479	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2591057	European Nucleotide Archive	TARA_007_SRF_0.22-1.6	Mediterranean Sea [MRGID:1905]	Mediterranean Sea	37.051	1.938	7.5		0.03	0.00	0.06	23.8	37.5	HiSeq-Illumi	59116478	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2619548	European Nucleotide Archive	TARA_009_DCM_0.22-1.6	Mediterranean Sea [MRGID:1905]	Mediterranean Sea	39.061	5.942	55		0.06	0.02	0.02	16.2	37.8	HiSeq-Illumi	166347645	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2619531	European Nucleotide Archive	TARA_009_SRF_0.22-1.6	Mediterranean Sea [MRGID:1905]	Mediterranean Sea	39.163	5.916	5.8		0.02	0.01	0.02	23.9	38	HiSeq-Illumi	211904463	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2619678	European Nucleotide Archive	TARA_018_DCM_0.22-1.6	Mediterranean Sea [MRGID:1905]	Mediterranean Sea	35.753	14.277	61.6	237.9	-0.01	0.03	0.01	18.4	37.9	HiSeq-Illumi	180928152	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2619667	European Nucleotide Archive	TARA_018_SRF_0.22-1.6	Mediterranean Sea [MRGID:1905]	Mediterranean Sea	35.759	14.257	5.4	207.8	0.10	0.02	0.03	21.4	37.9	HiSeq-Illumi	186901404	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2591098	European Nucleotide Archive	TARA_023_DCM_0.22-1.6	Mediterranean Sea [MRGID:1905]	Mediterranean Sea	42.174	17.725	55.2	224.3	0.04	0.01	0.01	15.7	38.4	HiSeq-Illumi	49930292	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2591084	European Nucleotide Archive	TARA_023_SRF_0.22-1.6	Mediterranean Sea [MRGID:1905]	Mediterranean Sea	42.204	17.715	5.5	220.0	0.03	0.01	0.01	17.6	38.2	HiSeq-Illumi	60142647	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMEA2619888	European Nucleotide Archive	TARA_034_SRF_0.1-0.22	Red Sea	Red Sea	18.397	39.875	5.4	184.1	0.01	0.02	0.19	27.6	38.6	HiSeq-Illumi	74437608	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373	
SAMN05224470	NCBI bioproject	LineP_Aug_2008_P26_10m	Open ocean waters in North eastern subartic pacific	NESAP	50.000	-145	10	287.7				11.37	32.49	Illumina	10976040	Steven Hallam UBC	
SAMN05224425	NCBI bioproject	LineP_Aug_2009_P04_10m	Coastal waters off Vancouver	NESAP	48.651	-126.667	10	283.4	5.30		0.77	12.33	32.24	Illumina	28953848	Steven Hallam UBC	

SAMN05224414	NCBI bioproject	LineP_Aug_2009_P16_10m	Open ocean waters in North eastern subartic pacific	NESAP	49.283	-134.666	10	258.0	3.50		0.64	15.48	32.49	Illumina	13008645	Steven Hallam UBC
SAMN05224399	NCBI bioproject	LineP_Jun_2009_P04_10m	Coastal waters off Vancouver	NESAP	48.650	-126.667	10	319.8	0.40		0.50	10.96	32.22	Illumina	11886673	Steven Hallam UBC
SAMEA2619399	European Nucleotide Archive	TARA_004_DCM_0.22-1.6	North Atlantic Ocean [MRGID:1912]	North Atlantic	36.553	-6.567	38.7					16.2	36.6	HiSeq-Illumi	29618354	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2619376	European Nucleotide Archive	TARA_004_SRF_0.22-1.6	North Atlantic Ocean [MRGID:1912]	North Atlantic	36.553	-6.567	10					20.5	36.6	HiSeq-Illumi	152438622	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623446	European Nucleotide Archive	TARA_141_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	9.848	-80.045	5.4	195.5	0.00	0.00	0.01	27.1	34.3	HiSeq-Illumi	140182768	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623488	European Nucleotide Archive	TARA_142_DCM_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	25.617	-88.453	123.7	193.0	0.04	0.02	0.02	24.9	36.2	HiSeq-Illumi	142314010	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623463	European Nucleotide Archive	TARA_142_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	25.526	-88.394	5.4	194.3	0.03	0.02	0.00	25	36.2	HiSeq-Illumi	144764785	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623627	European Nucleotide Archive	TARA_145_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	39.231	-70.038	5.5	233.9	4.27	0.11	0.35	14.1	35.2	HiSeq-Illumi	143074884	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623673	European Nucleotide Archive	TARA_146_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	34.671	-71.309	11.7	214.4	0.52	0.22	0.02	19.1	36.5	HiSeq-Illumi	155009509	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623734	European Nucleotide Archive	TARA_148_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	31.695	-64.249	6.1	212.6	0.06	0.09	0.00	20.4	36.6	HiSeq-Illumi	151176043	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623756	European Nucleotide Archive	TARA_148b_MES_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	34.150	-56.968	246.4	191.8	4.10	0.03	0.18	18.2	36.6	HiSeq-Illumi	149653178	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623774	European Nucleotide Archive	TARA_149_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	34.113	-49.918	5.5	220.2	0.43	0.25	0.06	18.7	36.4	HiSeq-Illumi	161799052	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623826	European Nucleotide Archive	TARA_150_DCM_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	35.843	-37.153	39.8	230.1	0.13	0.04	0.00	17.7	36.2	HiSeq-Illumi	162316515	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623808	European Nucleotide Archive	TARA_150_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	35.935	-37.303	5.5	228.4	0.13	0.04	0.01	17.6	36.3	HiSeq-Illumi	173070328	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623868	European Nucleotide Archive	TARA_151_DCM_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	36.181	-28.937	77.6	228.5	0.04	0.01	0.01	16.8	36.2	HiSeq-Illumi	157338966	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623850	European Nucleotide Archive	TARA_151_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	36.172	-29.023	5.4	232.1	0.00	0.02	0.01	17.3	36.2	HiSeq-Illumi	173320739	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623919	European Nucleotide Archive	TARA_152_MIX_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	43.706	-16.879	23.9	239.4	1.94	0.32	0.17	14.3	36	HiSeq-Illumi	173137389	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623886	European Nucleotide Archive	TARA_152_SRF_0.22-3	North Atlantic Ocean [MRGID:1912]	North Atlantic	43.679	-16.834	5.4	243.1	1.85	0.31	0.16	14.3	36	HiSeq-Illumi	144261764	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622336	European Nucleotide Archive	TARA_109_DCM_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	2.030	-84.555	29.8	203.1	4.49	0.11	0.50	26.5	34.3	HiSeq-Illumi	137818935	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622316	European Nucleotide Archive	TARA_109_SRF_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	1.993	-84.577	5.4	198.6	0.86	0.04	0.27	27.6	33.4	HiSeq-Illumi	169531608	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623079	European Nucleotide Archive	TARA_132_DCM_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	31.517	-159.046	113.8	225.5	0.03	0.02	0.13	15.3	34.4	HiSeq-Illumi	220688156	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623059	European Nucleotide Archive	TARA_132_SRF_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	31.521	-158.996	5.5	197.7	0.01	0.00	0.01	25.2	35.2	HiSeq-Illumi	148553071	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623135	European Nucleotide Archive	TARA_133_DCM_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	35.400	-127.750	47.2	227.7	1.22	0.08	0.46	13.2	33.2	HiSeq-Illumi	159687766	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623116	European Nucleotide Archive	TARA_133_SRF_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	35.367	-127.742	5.5	224.4	0.02	0.00	0.29	19.2	33.1	HiSeq-Illumi	235552324	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623295	European Nucleotide Archive	TARA_137_DCM_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	14.208	-116.647	44.2	95.4	5.74	0.31	0.88	18.6	34.4	HiSeq-Illumi	180592631	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373

SAMEA2623275	European Nucleotide Archive	TARA_137_SRF_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	14.204	-116.626	5.4	195.1	2.37	0.07	0.46	26.4	33.9	HiSeq-Illumi	166511956	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623370	European Nucleotide Archive	TARA_138_DCM_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	6.338	-102.954	58.1	77.0	12.07	0.83	1.11	19	34.6	HiSeq-Illumi	154522283	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623350	European Nucleotide Archive	TARA_138_SRF_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	6.333	-102.943	5.4	196.9	0.00	0.00	0.16	26.6	33.4	HiSeq-Illumi	157012629	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2623426	European Nucleotide Archive	TARA_140_SRF_0.22-3	North Pacific Ocean [MRGID:1908]	North Pacific	7.412	-79.302	5.4	205.3	0.00	0.00	0.08	26.6	28.9	HiSeq-Illumi	170358537	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620950	European Nucleotide Archive	TARA_066_DCM_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-34.890	18.046	28.6	240.4	2.97	0.26	0.37	15	35.3	HiSeq-Illumi	62835775	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620929	European Nucleotide Archive	TARA_066_SRF_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-34.945	17.919	5.4	238.9	3.04	0.30	0.34	15	35.3	HiSeq-Illumi	127013558	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620979	European Nucleotide Archive	TARA_067_SRF_0.22-0.45	South Atlantic Ocean [MRGID:1914]	South Atlantic	-32.240	17.710	5.5	249.4	6.92	0.17	1.02	12.8	34.8	HiSeq-Illumi	158396282	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620970	European Nucleotide Archive	TARA_067_SRF_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-32.240	17.710	5.5	249.4	6.92	0.17	1.02	12.8	34.8	HiSeq-Illumi	69017274	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620980	European Nucleotide Archive	TARA_067_SRF_0.45-0.8	South Atlantic Ocean [MRGID:1914]	South Atlantic	-32.240	17.710	5.5	249.4	6.92	0.17	1.02	12.8	34.8	HiSeq-Illumi	155390499	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621044	European Nucleotide Archive	TARA_068_DCM_0.22-0.45	South Atlantic Ocean [MRGID:1914]	South Atlantic	-31.027	4.680	40.3	231.7	0.79	0.29	0.23	16.8	35.7	HiSeq-Illumi	142116093	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621037	European Nucleotide Archive	TARA_068_DCM_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-31.027	4.680	40.3	231.7	0.79	0.29	0.23	16.8	35.7	HiSeq-Illumi	72584098	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621045	European Nucleotide Archive	TARA_068_DCM_0.45-0.8	South Atlantic Ocean [MRGID:1914]	South Atlantic	-31.027	4.680	40.3	231.7	0.79	0.29	0.23	16.8	35.7	HiSeq-Illumi	118524702	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621020	European Nucleotide Archive	TARA_068_SRF_0.22-0.45	South Atlantic Ocean [MRGID:1914]	South Atlantic	-31.027	4.665	5.4	231.9	1.05	0.25	0.23	16.8	35.7	HiSeq-Illumi	127126692	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621013	European Nucleotide Archive	TARA_068_SRF_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-31.027	4.665	5.4	231.9	1.05	0.25	0.23	16.8	35.7	HiSeq-Illumi	99179064	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621021	European Nucleotide Archive	TARA_068_SRF_0.45-0.8	South Atlantic Ocean [MRGID:1914]	South Atlantic	-31.027	4.665	5.4	231.9	1.05	0.25	0.23	16.8	35.7	HiSeq-Illumi	156173417	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621075	European Nucleotide Archive	TARA_070_SRF_0.22-0.45	South Atlantic Ocean [MRGID:1914]	South Atlantic	-20.409	-3.176	5.4	215.7	0.94	0.05	0.36	19.8	36.4	HiSeq-Illumi	173683964	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621066	European Nucleotide Archive	TARA_070_SRF_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-20.409	-3.176	5.4	215.7	0.94	0.05	0.36	19.8	36.4	HiSeq-Illumi	94196162	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621076	European Nucleotide Archive	TARA_070_SRF_0.45-0.8	South Atlantic Ocean [MRGID:1914]	South Atlantic	-20.409	-3.176	5.4	215.7	0.94	0.05	0.36	19.8	36.4	HiSeq-Illumi	161588490	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621155	European Nucleotide Archive	TARA_072_DCM_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-8.730	-17.960	95.4	194.4	0.03	0.01	0.14	24.1	36.6	HiSeq-Illumi	115780700	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621132	European Nucleotide Archive	TARA_072_SRF_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-8.779	-17.910	5.8	199.1	0.02	0.00	0.10	25	36.4	HiSeq-Illumi	185942437	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621221	European Nucleotide Archive	TARA_076_DCM_0.22-0.45	South Atlantic Ocean [MRGID:1914]	South Atlantic	-21.029	-35.350	148	203.8	-0.02	0.02	0.04	21.6	36.7	HiSeq-Illumi	148812120	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621216	European Nucleotide Archive	TARA_076_DCM_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-21.029	-35.350	148	203.8	-0.02	0.02	0.04	21.6	36.7	HiSeq-Illumi	175304252	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621222	European Nucleotide Archive	TARA_076_DCM_0.45-0.8	South Atlantic Ocean [MRGID:1914]	South Atlantic	-21.029	-35.350	148	203.8	-0.02	0.02	0.04	21.6	36.7	HiSeq-Illumi	99420785	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621203	European Nucleotide Archive	TARA_076_SRF_0.22-0.45	South Atlantic Ocean [MRGID:1914]	South Atlantic	-20.935	-35.180	5.5	206.2	0.00	0.00	0.06	23.3	37.1	HiSeq-Illumi	174321237	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621198	European Nucleotide Archive	TARA_076_SRF_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-20.935	-35.180	5.5	206.2	0.00	0.00	0.06	23.3	37.1	HiSeq-Illumi	180079780	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373

SAMEA2621204	European Nucleotide Archive	TARA_076_SRF_0.45-0.8	South Atlantic Ocean [MRGID:1914]	South Atlantic	-20.935	-35.180	5.5	206.2	0.00	0.00	0.06	23.3	37.1	HiSeq-Illumi	138195772	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621277	European Nucleotide Archive	TARA_078_DCM_0.22-0.45	South Atlantic Ocean [MRGID:1914]	South Atlantic	-30.148	-43.271	118.3	217.1	0.05	0.05	0.00	19.3	36.3	HiSeq-Illumi	147446967	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621272	European Nucleotide Archive	TARA_078_DCM_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-30.148	-43.271	118.3	217.1	0.05	0.05	0.00	19.3	36.3	HiSeq-Illumi	167819047	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621278	European Nucleotide Archive	TARA_078_DCM_0.45-0.8	South Atlantic Ocean [MRGID:1914]	South Atlantic	-30.148	-43.271	118.3	217.1	0.05	0.05	0.00	19.3	36.3	HiSeq-Illumi	127093281	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621259	European Nucleotide Archive	TARA_078_SRF_0.22-0.45	South Atlantic Ocean [MRGID:1914]	South Atlantic	-30.137	-43.290	5.6	221.5	0.02	0.00	0.00	19.9	36.3	HiSeq-Illumi	143025080	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621254	European Nucleotide Archive	TARA_078_SRF_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-30.137	-43.290	5.6	221.5	0.02	0.00	0.00	19.9	36.3	HiSeq-Illumi	165250546	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621260	European Nucleotide Archive	TARA_078_SRF_0.45-0.8	South Atlantic Ocean [MRGID:1914]	South Atlantic	-30.137	-43.290	5.6	221.5	0.02	0.00	0.00	19.9	36.3	HiSeq-Illumi	111032501	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621423	European Nucleotide Archive	TARA_082_DCM_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-47.201	-57.945	41.8	306.2	18.93	0.14	1.42	7	34.1	HiSeq-Illumi	192678074	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621401	European Nucleotide Archive	TARA_082_SRF_0.22-3	South Atlantic Ocean [MRGID:1914]	South Atlantic	-47.186	-58.290	5.5	305.0	18.00	0.15	1.30	7.3	34	HiSeq-Illumi	104910011	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621812	European Nucleotide Archive	TARA_093_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-33.912	-73.054	33.8	237.2	7.18	0.37	1.07	16.4	34.3	HiSeq-Illumi	154040756	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621779	European Nucleotide Archive	TARA_093_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-34.061	-73.107	5.3	244.9	0.01	0.01	0.52	18	34.3	HiSeq-Illumi	130621917	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621839	European Nucleotide Archive	TARA_094_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-32.797	-87.069	5.4	219.2	0.03	0.00	0.28	21.1	34.7	HiSeq-Illumi	195083051	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621859	European Nucleotide Archive	TARA_096_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-29.724	-101.160	5.5	204.1	0.02	0.00	0.16	23.8	35.8	HiSeq-Illumi	170572909	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622021	European Nucleotide Archive	TARA_098_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-25.826	-111.729	183.3	210.6	0.03	0.02	0.10	20.2	35.8	HiSeq-Illumi	116973594	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621990	European Nucleotide Archive	TARA_098_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-25.805	-111.720	5.6	200.5	0.05	0.00	0.20	25.1	36.4	HiSeq-Illumi	111583396	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622074	European Nucleotide Archive	TARA_099_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-21.146	-104.787	5.4	204.0	0.04	0.00	0.29	23.8	36.1	HiSeq-Illumi	145400798	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622119	European Nucleotide Archive	TARA_100_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-12.972	-96.012	57.6	216.8	5.54	0.16	0.78	20.6	35.5	HiSeq-Illumi	148309956	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622149	European Nucleotide Archive	TARA_100_MES_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-12.979	-96.023	175.3	0.7	23.87	0.03	2.68	13	34.8	HiSeq-Illumi	167230059	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622097	European Nucleotide Archive	TARA_100_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-13.002	-95.976	5.5	200.2	6.06	0.14	0.68	25.3	35.8	HiSeq-Illumi	175161727	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622219	European Nucleotide Archive	TARA_102_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-5.267	-85.273	45.7	103.9	23.20	1.20	1.86	19.6	34.9	HiSeq-Illumi	187261361	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622173	European Nucleotide Archive	TARA_102_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-5.253	-85.155	5.5	206.0	12.28	0.32	1.00	24.9	34.7	HiSeq-Illumi	134073668	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622402	European Nucleotide Archive	TARA_110_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-1.900	-84.627	48.7	144.6	10.29	0.41	0.93	21.8	35.1	HiSeq-Illumi	186233875	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622376	European Nucleotide Archive	TARA_110_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-2.013	-84.589	5.5	190.8	7.89	0.31	0.75	23.9	35	HiSeq-Illumi	149505095	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622478	European Nucleotide Archive	TARA_111_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-16.959	-100.675	89	211.5	0.73	0.20	0.44	19.9	35.7	HiSeq-Illumi	166287723	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622452	European Nucleotide Archive	TARA_111_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-16.960	-100.634	5.9	208.9	2.64	0.04	0.50	22.8	36	HiSeq-Illumi	172542814	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373

SAMEA2622545	European Nucleotide Archive	TARA_112_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-23.219	-129.500	153.5	207.1	0.02	0.00	0.11	22.3	35.9	HiSeq-illumina	179780813	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622518	European Nucleotide Archive	TARA_112_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-23.281	-129.395	5.4	202.2	0.02	0.01	0.14	24.2	36.5	HiSeq-illumina	179430610	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622694	European Nucleotide Archive	TARA_122_DCM_0.1-0.22	South Pacific Ocean [MRGID:1910]	South Pacific	-9.006	-139.139	113.3	179.9	2.70	0.10	0.59	24.7	36.1	HiSeq-illumina	73542094	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622695	European Nucleotide Archive	TARA_122_DCM_0.22-0.45	South Pacific Ocean [MRGID:1910]	South Pacific	-9.006	-139.139	113.3	179.9	2.70	0.10	0.59	24.7	36.1	HiSeq-illumina	150764901	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622690	European Nucleotide Archive	TARA_122_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-9.006	-139.139	113.3	179.9	2.70	0.10	0.59	24.7	36.1	HiSeq-illumina	138016385	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622696	European Nucleotide Archive	TARA_122_DCM_0.45-0.8	South Pacific Ocean [MRGID:1910]	South Pacific	-9.006	-139.139	113.3	179.9	2.70	0.10	0.59	24.7	36.1	HiSeq-illumina	154859558	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622656	European Nucleotide Archive	TARA_122_SRF_0.1-0.22	South Pacific Ocean [MRGID:1910]	South Pacific	-8.997	-139.196	5.9	186.2	5.34	0.12	0.57	26.5	35.4	HiSeq-illumina	72290317	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622657	European Nucleotide Archive	TARA_122_SRF_0.22-0.45	South Pacific Ocean [MRGID:1910]	South Pacific	-8.997	-139.196	5.9	186.2	5.34	0.12	0.57	26.5	35.4	HiSeq-illumina	112536637	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622652	European Nucleotide Archive	TARA_122_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-8.997	-139.196	5.9	186.2	5.34	0.12	0.57	26.5	35.4	HiSeq-illumina	129242788	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622658	European Nucleotide Archive	TARA_122_SRF_0.45-0.8	South Pacific Ocean [MRGID:1910]	South Pacific	-8.997	-139.196	5.9	186.2	5.34	0.12	0.57	26.5	35.4	HiSeq-illumina	138238123	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622736	European Nucleotide Archive	TARA_123_MIX_0.1-0.22	South Pacific Ocean [MRGID:1910]	South Pacific	-8.911	-140.285	148	161.3	3.96	1.47	0.66	22.1	35.9	HiSeq-illumina	81886087	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622737	European Nucleotide Archive	TARA_123_MIX_0.22-0.45	South Pacific Ocean [MRGID:1910]	South Pacific	-8.911	-140.285	148	161.3	3.96	1.47	0.66	22.1	35.9	HiSeq-illumina	150560098	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622733	European Nucleotide Archive	TARA_123_MIX_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-8.911	-140.285	148	161.3	3.96	1.47	0.66	22.1	35.9	HiSeq-illumina	173529265	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622738	European Nucleotide Archive	TARA_123_MIX_0.45-0.8	South Pacific Ocean [MRGID:1910]	South Pacific	-8.911	-140.285	148	161.3	3.96	1.47	0.66	22.1	35.9	HiSeq-illumina	137931308	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622715	European Nucleotide Archive	TARA_123_SRF_0.22-0.45	South Pacific Ocean [MRGID:1910]	South Pacific	-8.907	-140.283	5.5	189.8	4.76	0.14	0.53	26.6	35.4	HiSeq-illumina	171857347	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622710	European Nucleotide Archive	TARA_123_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-8.907	-140.283	5.5	189.8	4.76	0.14	0.53	26.6	35.4	HiSeq-illumina	144023698	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622716	European Nucleotide Archive	TARA_123_SRF_0.45-0.8	South Pacific Ocean [MRGID:1910]	South Pacific	-8.907	-140.283	5.5	189.8	4.76	0.14	0.53	26.6	35.4	HiSeq-illumina	164411353	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622799	European Nucleotide Archive	TARA_124_MIX_0.1-0.22	South Pacific Ocean [MRGID:1910]	South Pacific	-9.071	-140.597	118.3	175.9	0.86	0.35	0.49	25.2	35.8	HiSeq-illumina	83511924	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622800	European Nucleotide Archive	TARA_124_MIX_0.22-0.45	South Pacific Ocean [MRGID:1910]	South Pacific	-9.071	-140.597	118.3	175.9	0.86	0.35	0.49	25.2	35.8	HiSeq-illumina	144025441	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622796	European Nucleotide Archive	TARA_124_MIX_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-9.071	-140.597	118.3	175.9	0.86	0.35	0.49	25.2	35.8	HiSeq-illumina	177586325	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622801	European Nucleotide Archive	TARA_124_MIX_0.45-0.8	South Pacific Ocean [MRGID:1910]	South Pacific	-9.071	-140.597	118.3	175.9	0.86	0.35	0.49	25.2	35.8	HiSeq-illumina	152307354	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622763	European Nucleotide Archive	TARA_124_SRF_0.1-0.22	South Pacific Ocean [MRGID:1910]	South Pacific	-9.150	-140.522	9.9	190.7	6.02	0.16	0.63	26.5	35.4	HiSeq-illumina	69048551	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622764	European Nucleotide Archive	TARA_124_SRF_0.22-0.45	South Pacific Ocean [MRGID:1910]	South Pacific	-9.150	-140.522	9.9	190.7	6.02	0.16	0.63	26.5	35.4	HiSeq-illumina	139921860	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622759	European Nucleotide Archive	TARA_124_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-9.150	-140.522	9.9	190.7	6.02	0.16	0.63	26.5	35.4	HiSeq-illumina	232627344	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622765	European Nucleotide Archive	TARA_124_SRF_0.45-0.8	South Pacific Ocean [MRGID:1910]	South Pacific	-9.150	-140.522	9.9	190.7	6.02	0.16	0.63	26.5	35.4	HiSeq-illumina	150305739	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373

SAMEA2622841	European Nucleotide Archive	TARA_125_MIX_0.1-0.22	South Pacific Ocean [MRGID:1910]	South Pacific	-8.900	-142.546	138.2	160.5	3.09	0.06	0.56	23.7	36.3	HiSeq-illumina	92519259	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622842	European Nucleotide Archive	TARA_125_MIX_0.22-0.45	South Pacific Ocean [MRGID:1910]	South Pacific	-8.900	-142.546	138.2	160.5	3.09	0.06	0.56	23.7	36.3	HiSeq-illumina	165021188	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622837	European Nucleotide Archive	TARA_125_MIX_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-8.900	-142.546	138.2	160.5	3.09	0.06	0.56	23.7	36.3	HiSeq-illumina	145634620	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622843	European Nucleotide Archive	TARA_125_MIX_0.45-0.8	South Pacific Ocean [MRGID:1910]	South Pacific	-8.900	-142.546	138.2	160.5	3.09	0.06	0.56	23.7	36.3	HiSeq-illumina	172949278	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622821	European Nucleotide Archive	TARA_125_SRF_0.1-0.22	South Pacific Ocean [MRGID:1910]	South Pacific	-8.911	-142.557	5.5	187.3	3.54	0.19	0.56	26.8	35.4	HiSeq-illumina	79733673	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622822	European Nucleotide Archive	TARA_125_SRF_0.22-0.45	South Pacific Ocean [MRGID:1910]	South Pacific	-8.911	-142.557	5.5	187.3	3.54	0.19	0.56	26.8	35.4	HiSeq-illumina	156388404	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622817	European Nucleotide Archive	TARA_125_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	-8.911	-142.557	5.5	187.3	3.54	0.19	0.56	26.8	35.4	HiSeq-illumina	154036689	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622823	European Nucleotide Archive	TARA_125_SRF_0.45-0.8	South Pacific Ocean [MRGID:1910]	South Pacific	-8.911	-142.557	5.5	187.3	3.54	0.19	0.56	26.8	35.4	HiSeq-illumina	148150069	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622923	European Nucleotide Archive	TARA_128_DCM_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	0.022	-153.686	41.7	177.0	4.98	0.28	0.55	26.1	35.1	HiSeq-illumina	125802183	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2622901	European Nucleotide Archive	TARA_128_SRF_0.22-3	South Pacific Ocean [MRGID:1910]	South Pacific	0.000	-153.676	5.4	179.9	4.81	0.27	0.54	26.1	35.1	HiSeq-illumina	139904160	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621487	European Nucleotide Archive	TARA_084_SRF_0.22-3	Southern Ocean [MRGID:1907]	Southern Ocean	-60.229	-60.648	5.9	338.3	25.03	0.27	1.72	1.8	33.7	HiSeq-illumina	190610130	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621536	European Nucleotide Archive	TARA_085_DCM_0.22-3	Southern Ocean [MRGID:1907]	Southern Ocean	-62.223	-49.214	87.4	325.4	30.94	0.06	2.31	-0.8	34.3	HiSeq-illumina	178428793	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2621509	European Nucleotide Archive	TARA_085_SRF_0.22-3	Southern Ocean [MRGID:1907]	Southern Ocean	-62.039	-49.529	5.9	343.4	28.39	0.11	2.11	0.7	34.4	HiSeq-illumina	176078135	Sunagawa et al. Science 22 May 2015: Vol. 348, Issue 6373
SAMEA2620158, SAMEA2620136, SAMEA2620147, SAMEA2620169	European Nucleotide Archive	TARA_B100000116	Indian Ocean [MRGID:1904]	Indian Ocean	17.485	68.000	75	59.3	13.83	0.04	1.50	23.6	35.9	HiSeq-illumina	1064527710	Salazar et al. Cell 14 November 2019: Vol. 179, Issue 5
SAMEA2620261	European Nucleotide Archive	TARA_B100000133	Indian Ocean [MRGID:1904]	Indian Ocean	6.000	73.907	80	137.9	0.00	0.15	0.00	27.96	35.044	HiSeq-illumina	292998252	Salazar et al. Cell 14 November 2019: Vol. 179, Issue 5
SAMEA2621511	European Nucleotide Archive	TARA_B100000624	North Pacific Ocean [MRGID:1908]	North Pacific	6.611	-155.054	85	183.2	0.00	0.69	4.11	28.308	34.8	HiSeq-illumina	225903500	Salazar et al. Cell 14 November 2019: Vol. 179, Issue 5
SAMEA2623027	European Nucleotide Archive	TARA_B100000639	North Pacific Ocean [MRGID:1908]	North Pacific	22.790	-157.944	110	204.2	0.00	0.01	0.02	22.3	35.3	HiSeq-illumina	298456081	Salazar et al. Cell 14 November 2019: Vol. 179, Issue 5
SAMEA2623083	European Nucleotide Archive	TARA_B100000660	North Pacific Ocean [MRGID:1908]	North Pacific	31.517	-159.046	115	222.9	0.00	0.02	0.12	15.32	34.4	HiSeq-illumina	183888911	Salazar et al. Cell 14 November 2019: Vol. 179, Issue 5
SAMN04335825	NCBI SRA	Mt_ETNP_NH14_S10_100m_cDNA_illumina	North Pacific Ocean [MRGID:1908]	North Pacific	18.310	-105.209	100							HiSeq-illumina	2149661	Garcia-Robledo et al. PNAS 17 July 2017: Vol 114, Issue 31
SAMN03379861	NCBI SRA	Mt_ETNP_NH14_S10_150m_cDNA_illumina	North Pacific Ocean [MRGID:1908]	North Pacific	18.310	-105.209	150							HiSeq-illumina	4523472	Garcia-Robledo et al. PNAS 17 July 2017: Vol 114, Issue 31
SAMN04335847	NCBI SRA	Mt_ETNP_NH14_S14_100m_cDNA_illumina	North Pacific Ocean [MRGID:1908]	North Pacific	21.292	-108.241	100							HiSeq-illumina	2520169	Garcia-Robledo et al. PNAS 17 July 2017: Vol 114, Issue 31
SAMN04335847	NCBI SRA	Mt_ETNP_NH14_S14_150m_cDNA_illumina	North Pacific Ocean [MRGID:1908]	North Pacific	21.292	-107.241	150							HiSeq-illumina	1291622	Garcia-Robledo et al. PNAS 17 July 2017: Vol 114, Issue 31
SAMN04335848	NCBI SRA	Mt_ETNP_NH14_S14_200m_cDNA_illumina	North Pacific Ocean [MRGID:1908]	North Pacific	21.292	-106.241	200							HiSeq-illumina	1212126	Garcia-Robledo et al. PNAS 17 July 2017: Vol 114, Issue 31
SAMN04335824	NCBI SRA	Mt_ETNP_NH14_S14_60m_cDNA_illumina	North Pacific Ocean [MRGID:1908]	North Pacific	21.292	-105.241	60							HiSeq-illumina	2302732	Garcia-Robledo et al. PNAS 17 July 2017: Vol 114, Issue 31
SAMN04335853	NCBI SRA	Mt_ETNP_NH14_S16_100m_cDNA_illumina	North Pacific Ocean [MRGID:1908]	North Pacific	18.900	-104.5	100							HiSeq-illumina	1601640	Garcia-Robledo et al. PNAS 17 July 2017: Vol 114, Issue 31

