

Supplementary Materials

Table S1. Distribution of the *narB*, *nirA*, and *nitM* genes in cyanobacteria.

Strain	<i>narB</i>	<i>nirA</i>	<i>nitM</i>	Strain	<i>narB</i>	<i>nirA</i>	<i>nitM</i>
α-cyanobacteria				β-cyanobacteria continued			
<i>Cyanobium gracile</i> PCC6307	+	+	-	<i>Anabaena variabilis</i> ATCC29413	+	+	-
<i>Synechococcus</i> sp. WH8102	+	+	-	<i>Pseudoanabaena</i> sp. PCC7367	+	+	-
<i>Synechococcus</i> sp. CC9605	+	+	+	<i>Gloeocapsa</i> sp. PCC7428	+	+	-
<i>Synechococcus</i> sp. CC9902	+	+	+	<i>Camaesiphon minitus</i> PCC6605	+	+	-
<i>Synechococcus</i> sp. CC9311	+	+	+	<i>Cyanobacterium stanieri</i> PCC 7202	+	+	+
<i>Synechococcus</i> sp. WH7803	+	+	+	<i>Cyanobacterium aponinum</i> PCC10605	+	+	-
<i>Synechococcus</i> sp. RCC307	+	+	+	<i>Calothrix</i> sp. PCC 6303	+	+	-
<i>Prochlorococcus marinus</i> NATL1A	-	+	+	<i>Nostoc</i> sp. PCC7524	+	+	-
<i>Prochlorococcus marinus</i> NATL2A	-	+	+	<i>Cyanothece</i> sp. PCC7424	+	+	-
<i>Prochlorococcus marinus</i> MIT9303	-	+	+	<i>Cyanothece</i> sp. PCC8801	+	+	-
<i>Prochlorococcus marinus</i> MIT9313	-	+	+	<i>Cyanothece</i> sp. PCC8802	+	+	-
<i>Prochlorococcus</i> sp. MIT 0801	-	+	+	<i>Arthrospira platensis</i> NIES-39	+	+	-
<i>Prochlorococcus marinus</i> MIT9211	-	-	-	<i>Cyanothece</i> sp. PCC 7822	+	+	-
<i>Prochlorococcus marinus</i> SS120	-	-	-	<i>Stanieria cyanosphaera</i> PCC 7437	+	+	-
<i>Prochlorococcus marinus</i> MED4	-	-	-	<i>Chroococcidiopsis thermalis</i> PCC 7203	+	+	-
<i>Prochlorococcus marinus</i> MIT9515	-	-	-	<i>Geitlerinema</i> sp. PCC 7407	+	+	-
<i>Prochlorococcus marinus</i> MIT9215	-	-	-	<i>Microcoleus</i> sp. PCC 7113	+	+	-
<i>Prochlorococcus marinus</i> MIT9301	-	-	-	<i>Crinalium epipsammum</i> PCC 9333	+	+	-
<i>Prochlorococcus marinus</i> MIT9312	-	-	-	<i>Oscillatoria nigro-viridis</i> PCC 7112	+	+	-
<i>Prochlorococcus marinus</i> AS9601	-	-	-	<i>Nostoc</i> sp. PCC 7107	+	+	-
<i>Prochlorococcus</i> sp. MIT 0604	-	-	-	<i>Nostoc punctiforme</i> ATCC29133	+	+	-
β-cyanobacteria				<i>Synechococcus</i> sp. PCC 6312	+	+	-
<i>Gloeobacter violaceus</i> PCC742	+	+	-	<i>Oscillatoria acuminata</i> PCC6304	+	+	-
<i>Gloeobacter</i> sp. JS	+	+	-	<i>Anabaena</i> sp. 90	+	+	-
<i>Synechococcus</i> sp. (Yellowstone a')	+	+	-	<i>Anabaena cylindrica</i> PCC7122	+	+	-
<i>Synechococcus</i> sp. (Yellowstone b')	+	+	-	<i>Cylindrospermum stagnale</i> PCC7417	+	+	-
<i>Thermosynechococcus elongates</i> BP1	+	+	-	<i>Calothrix</i> sp. PCC 7507	+	+	-
<i>Thermosynechococcus</i> sp. NK55	+	+	-	<i>Rivularia</i> sp. PCC 7116	+	+	-
<i>Pleurocapsa</i> sp. PCC7327	+	+	-	<i>Halothece</i> sp. PCC 7418	+	+	+
<i>Microcystis aeruginosa</i> NIES-843	+	+	-	<i>Dactylococcopsis salina</i> PCC 8305	+	+	+
<i>Cyanothece</i> sp. PCC7425	+	+	-	<i>Cyanothece</i> sp. ATCC51142	+	+	-
<i>Synechocystis</i> sp. PCC6803	+	+	-	<i>Trichodesmium erythraeum</i> IMS101	+	+	-
<i>Synechococcus</i> sp. PCC 7502	+	+	-	<i>Leptolyngbya</i> sp. PCC7376	+	+	-
<i>Synechococcus elongatus</i> PCC6301	+	+	-	<i>Acaryochloris marina</i> MBIC11017	+	+	-
<i>Synechococcus elongatus</i> PCC7942	+	+	-	<i>Synechococcus</i> sp. PCC7002	+	+	+
<i>Anabaena</i> sp. PCC7120	+	+	-	<i>Anabaena azollae</i> 0708	-	-	-
				<i>Cyanobacterium</i> _UCYN-A, 713887	-	-	-