

Figure S1

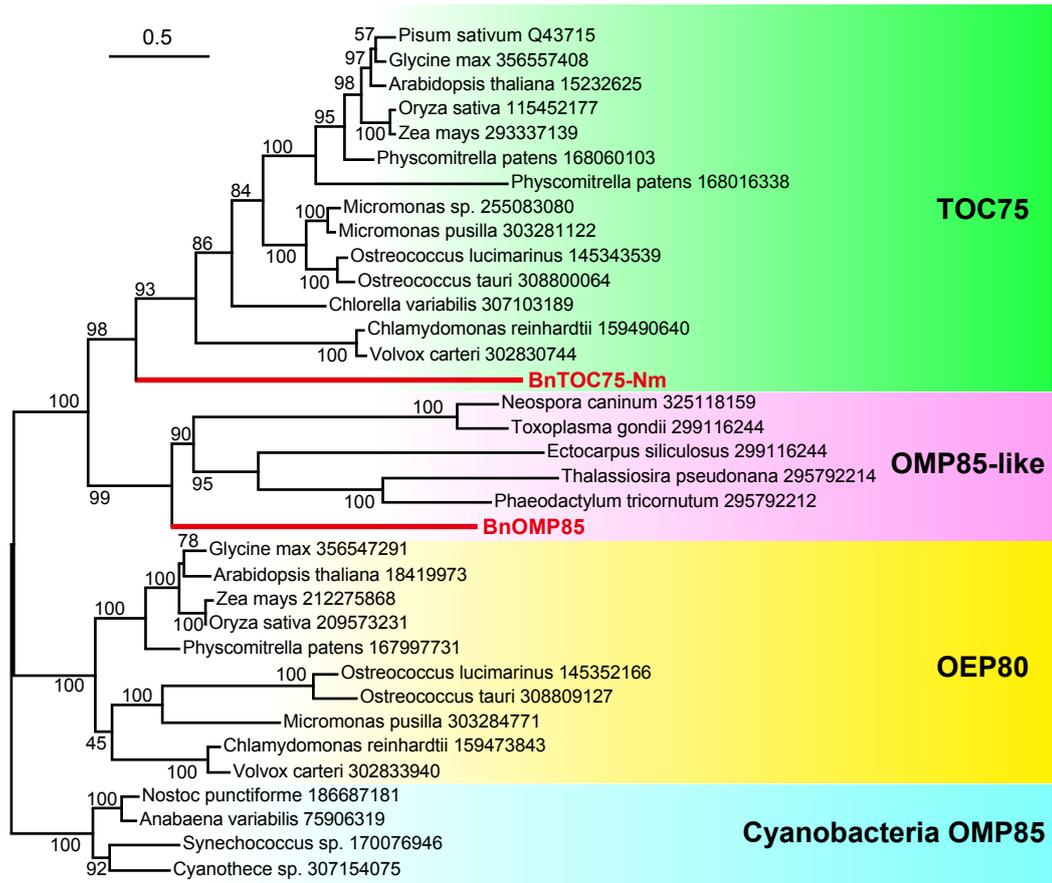


Figure S1. ML phylogenetic tree for OMP85 homologs of plants, green algae, cyanobacteria, and chlorarachniophytes. The number next to the species names indicate GenBank ID. The values at nodes are the bootstrap support and indicated when higher than 50%. The scale bar represents the estimated number of amino acid substitutions per site.

Figure S2

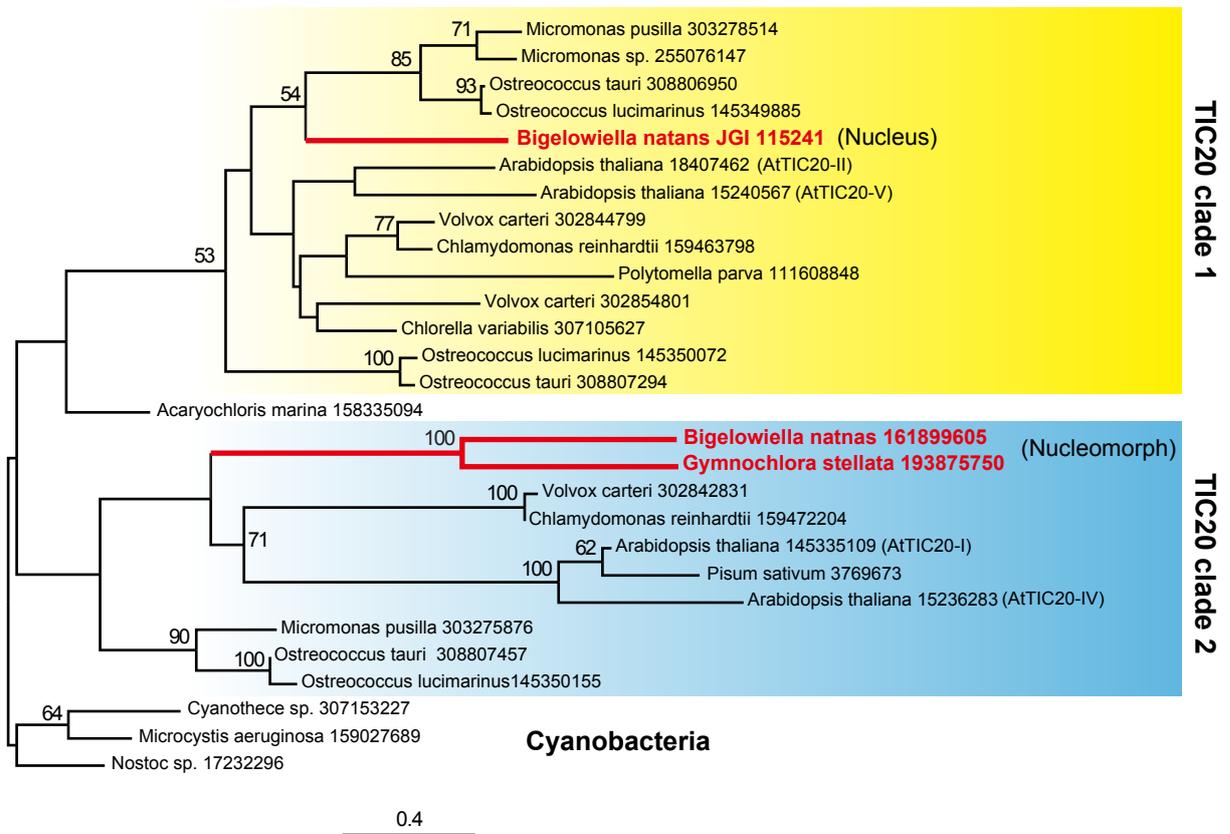


Figure S2. ML phylogenetic tree for TIC20 homologs of plants, green algae, cyanobacteria, and chlorarachniophytes. The number next to the species names indicate GenBank or JGI protein ID. The values at nodes are the bootstrap support and indicated when higher than 50%. The scale bar represents the estimated number of amino acid substitutions per site.

Supporting information

Table S1. The PCR primers used for 5' and 3' RACE of TOC and TIC genes.

fragment names	primer names	sequences (5' to 3')
TIC20-5'RACE	5'RACE Outer	GCTGATGGCGATGAATGAACACTG
	5'RACE Inner	CGCGGATCCGAACACTGCGTTTGCTGGCTTTGATG
	TIC20-R1	GCATCAGCCGCATTTCCTCAACTAAC
	TIC20-R2	CCATAGCCCACAGAGCAAAACACG
TIC21-3'RACE	TIC21-F1	ATGGTCCCGACATCATTGGCCTGCCT
	TIC21-F2	CACCGTTGGGGTCACGAGAGCATCT
	3'RACE Outer	GCGAGCACAGAATTAATACGACT
	3'RACE Inner	CGCGGATCCGAATTAATACGACTCACTATAGG
TIC32-5'RACE	5'RACE Outer	GCTGATGGCGATGAATGAACACTG
	5'RACE Inner	CGCGGATCCGAACACTGCGTTTGCTGGCTTTGATG
	TIC32-R1	GGAGAGATTCAAGGTCGGCCTC
	TIC32-R2	CCTCAGTACCTCCGGTGATGAC
TIC40-5'RACE	5'RACE Outer	GCTGATGGCGATGAATGAACACTG
	5'RACE Inner	CGCGGATCCGAACACTGCGTTTGCTGGCTTTGATG
	TIC40-R1	AATCCAGAGGCTTGCGGAGCG
	TIC40-R2	CTCGGGCGACTGAGCCTTACC
TIC40-3'RACE	TIC40-F1	GATACGTCGGGTGGGGTACACCTT
	TIC40-F2	GCAATGAATGGCATGAACGGC
	3'RACE Outer	GCGAGCACAGAATTAATACGACT
	3'RACE Inner	CGCGGATCCGAATTAATACGACTCACTATAGG
OMP85-5'RACE	5'RACE Outer	GCTGATGGCGATGAATGAACACTG
	5'RACE Inner	CGCGGATCCGAACACTGCGTTTGCTGGCTTTGATG
	OMP85-R1	GAAACCCTTCTTCGCGTAGTAACCATG
	OMP85-R2	GCTCTACAACATCGGATATGAGCGTAAC
OMP85-middle	OMP85-F1	TTACGCTCATATCCGATGTTGTAGAGCC
	OMP85-R3	TGATGCAGGACCTATCTCTCCATCCT
OMP85-3'RACE	OMP85-F1	TTACGCTCATATCCGATGTTGTAGAGCC
	OMP85-F2	AGGATGGAGAGATAGGTCCTGCATCA
	3'RACE Outer	GCGAGCACAGAATTAATACGACT
	3'RACE Inner	CGCGGATCCGAATTAATACGACTCACTATAGG

Outer and #1 primers were used for first PCR, and inner and #2 primers used for nested second PCR.

Table S2. The PCR primers used to amplify cDNA of Der1-like proteins.

fragment names	primer names	sequences (5' to 3')
BnDer1-49642	BnDer49-F	ACCAAGCTTATGTCGATGAGCCCGGAGG
	BnDer49-R	TCACCATGGTAAATGGATTCGGCAAAG
BnDer1-92850	BnDer92-F	ACCAAGCTTATGAGCCTTGAACAGGTTG
	BnDer92-Up	GTATTTGCCAAGGGTGCTCCTA
	BnDer92-Dw	TAGGAGCACCCCTTGGCAAATAC
	BnDer92-R	TCACCATGGACTCTACTCCTTCGTCACC

An *Nco*I site within the BnDer1-92850 fragment was deleted by the PCR-based site-directed mutagenesis technique using BnDer92-UP and –DW primers.