

## Supporting information to:

### The TolC-like protein HgdD of the cyanobacterium *Anabaena* sp. PCC 7120 is involved in secondary metabolite export and antibiotic resistance\*

Alexander Hahn, Mara Stevanovic, Oliver Mirus, and Enrico Schleiff\*  
From the Department of Biosciences, Center of Membrane Proteomics, Cluster of Excellence  
Frankfurt, Goethe University, 60438 Frankfurt, Germany

**Table S1.** Primers used for PCR/RT-PCR.

oligonucleotide name	Oligonucleotide sequence
alr2215intF	ATATATGAATTCGGGTTTGCGATTG
alr2215intR	ATATATGATATCGTCATGGGGTAGC
all5346intF	ATATATGAATTCGGTCAGCCAGTC
all5346intR	ATATATGATATCAGGTGGCGTAAGC
alr2887F	GCCTTCTTCTAGTGTGTGG
alr2887R	GGATCCAATCGGCTGATTCTCCTTGAGTG
alr0843F	CTGCGGAACTAGCAAC
alr0843R	AATTAAGTGCAGAAGCTTGAACTAAATGTGGTTC
alr2231F	AATTAAGGATCCGTGAAAAAATTATTTTCGC
alr2231R	AATTAAGTGCAGAAGCTTGAACTAAAAGTAGTAC
all4499F	GGGCATTCCAAGCAC
all4499R	CTCAGCACCAGTAGC
alr4550F	CCGCTACAGTAACGAAG
alr4550R	CAATGCGGTAGATGGG
alr4741F	GGCGGAAGATATAGTC
alr4741R	CCAAGCTAATCTCGCC
all5191F	CCCATGATAGTTGGGC
all5191R	GGAAATTGAACCGTCTCC
all7614F	CAGCCATCACAAC
all7614R	CGGTGGGAACATAATC
rnpBF	AGGGAGAGAGTAGGCGTTG
rnpBR	GGTTTACCGAGCCAGTACC

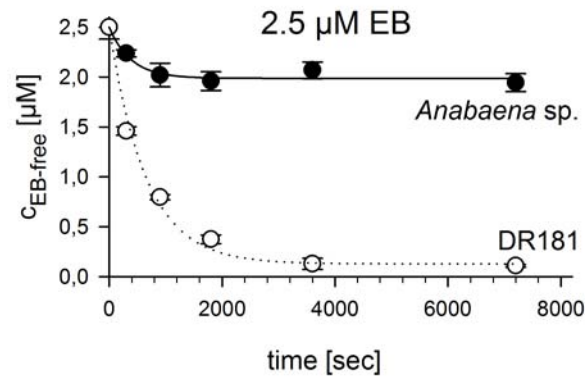


FIGURE S1. Ethidium uptake by *Anabaena* sp. and the *hgdD* mutant DR181 by analysis of the extracellular ethidium.

The ethidium bromide (EB) remaining in solution after incubation of wild-type (black) or DR181 (white) with 2.5 $\mu\text{M}$  EB was quantified after the indicated time periods. Lines indicate the analysis according to [E1].