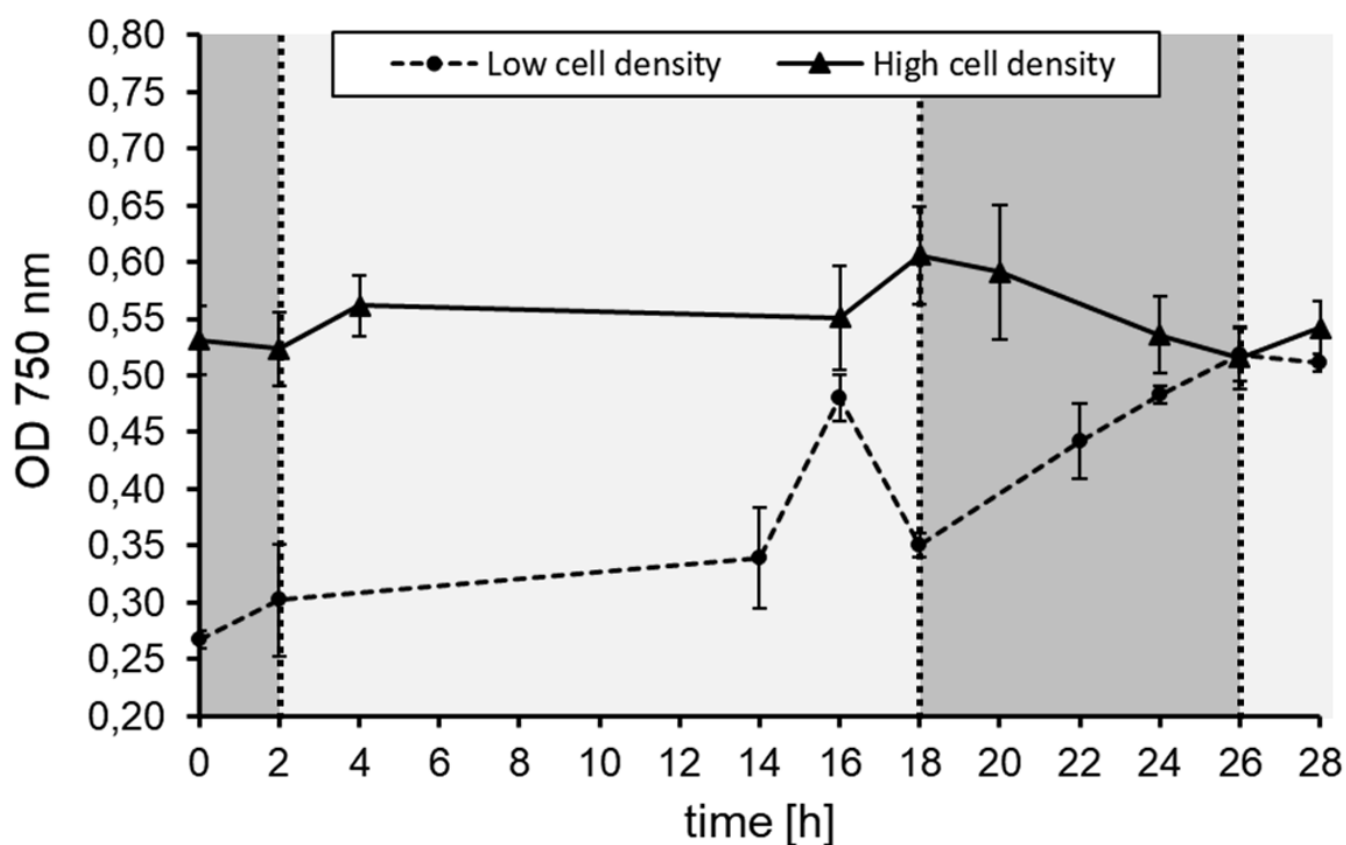




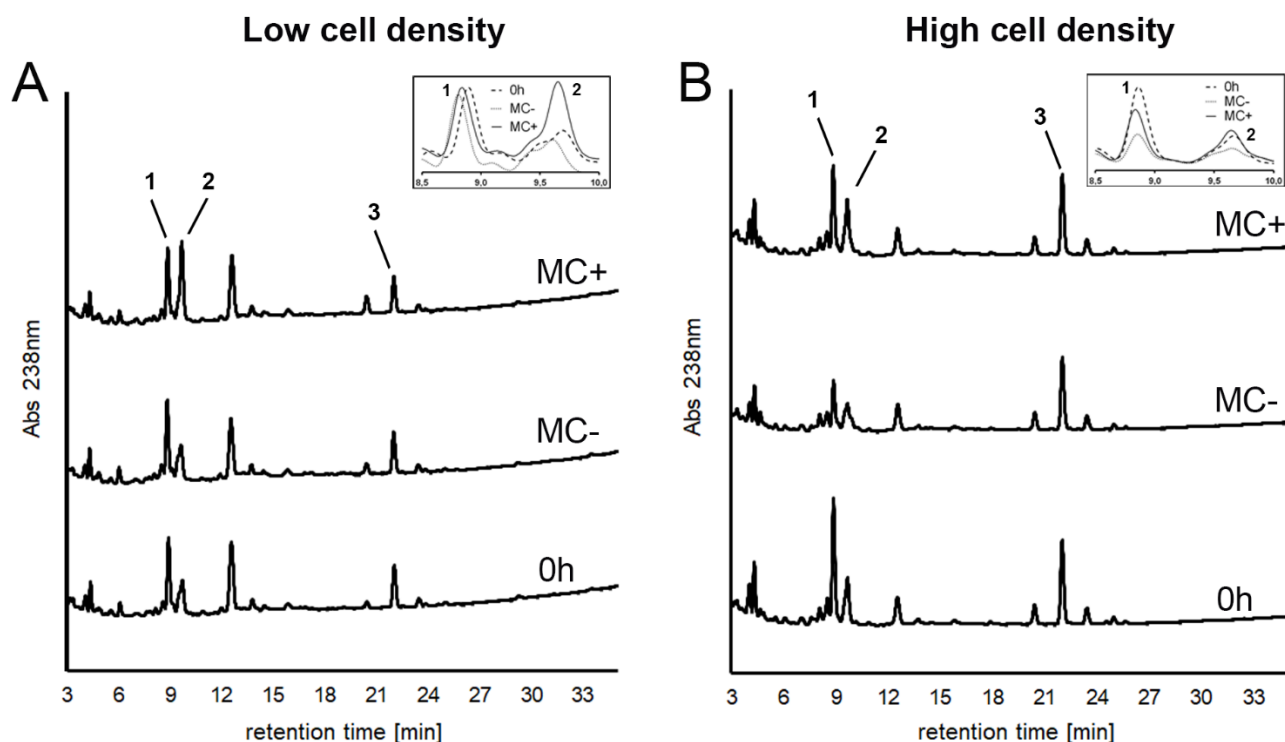
## Supplementary materials

Table S1. Primers used in qRT-PCR.

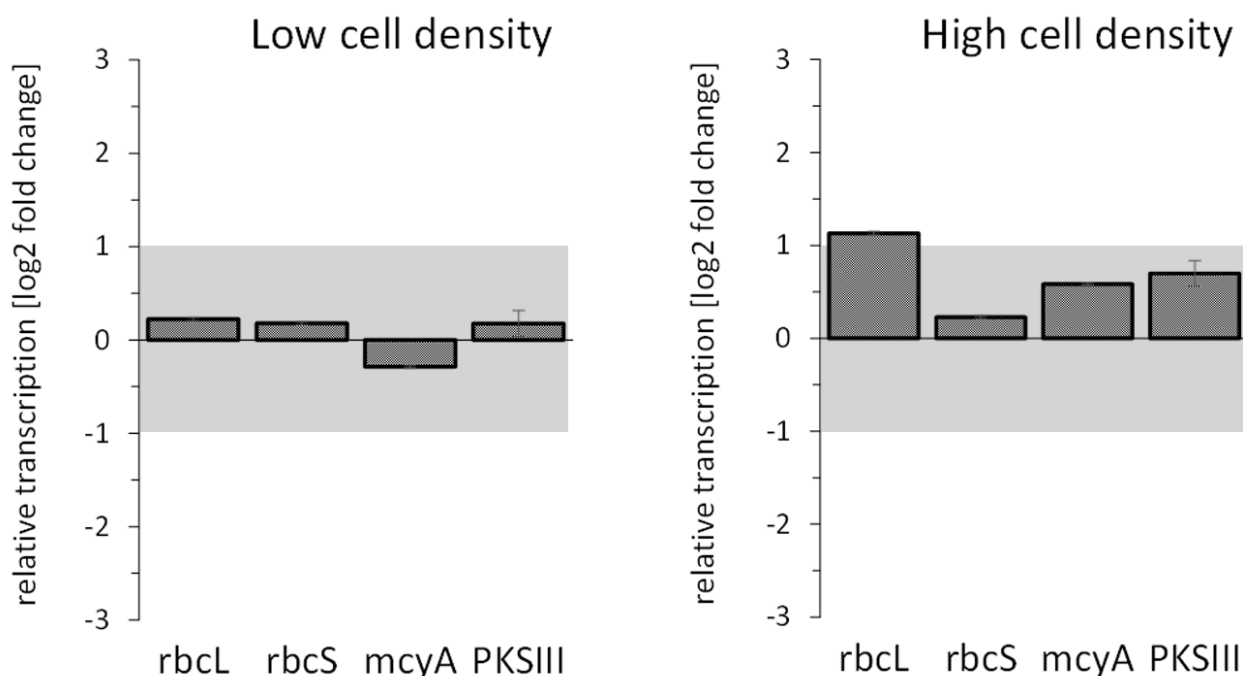
Target Gene	5′–3′-Sequence
<i>IPF47</i> (forward)	AAACTGCCGGTCAAAATCCC
<i>IPF47</i> (reverse)	GCCGCTCAAAATTGCTTTCC
<i>mcyA</i> (forward)	TGGGTTGATAGGGTGCCAAT
<i>mcyA</i> (reverse)	CCTCAATCTCAGCAAGGGGA
<i>rbcL</i> (forward)	AATCAAAACCCCCATCATCA
<i>rbcL</i> (reverse)	TGATCACCACCAGAGAGACG
<i>rbcS</i> (forward)	CTCACCGATCAACAAATTGC
<i>rbcS</i> (reverse)	TTCTTGGGGACCAGAAACAG
<i>rnpB</i> (forward)	GGGGTAAGGGTGCAAAGGT
<i>rnpB</i> (reverse)	AGACCAACCTTTGTCCCTCC



**Figure S1.** Growth curves of liquid cultures of *Microcystis* during a diel growth experiment. Three biological replicates of liquid cultures at two different initial cell densities were sampled at 9 time points and the optical densities were recorded photometrically at 750 nm. Light absorption properties of *Microcystis* cells can vary considerably with fluctuations in gas vesicle content, leading to frequent outlier data points. Lighter and darker shading corresponds to day and night phases, respectively.



**Figure S2.** HPLC profiles of culture supernatants of liquid cultures of *Microcystis* from a microcystin-addition experiment. Liquid cultures at low (A) and high (B) cell densities were grown for 2 hours at high light with the addition of MC to the growth medium (MC+) or without it (MC-). Culture supernatants were analyzed by HPLC. Insets show magnifications of the two main MC variant peaks from the same chromatograms.



**Figure S3.** Effects on transcription of microcystin addition to *Microcystis* liquid cultures. Low-light adapted liquid cultures at low and high cell densities were exposed for 2 hours to high light with or without the addition of MC to the growth medium. Total RNA was isolated and relative transcription of four genes analyzed by qRT-PCR. Values are normalized to samples without MC addition (log2 fold change = 0). Grey shading indicates interval of log2 fold changes between -1 and 1. Measurements were performed in triplicates.