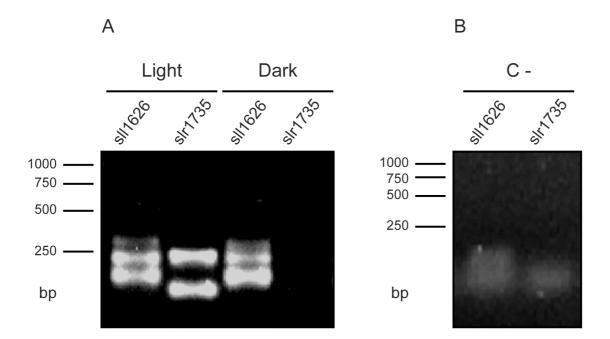
## SUPPLEMENTARY FIGURES



Supplementary FIG. S1. Ethidium bromide stained agarose gels showing the end results of the nested PCR after 3' RACE. (A) Total RNA extracted from cells grown in BG11 under continuous light ("Light") and exposed to 6 hours of dark conditions ("Dark") was used. The RT reactions were performed with the primer 3'RACE adapter (see Table 1), followed by two rounds of PCR, using specific oligonucleotides for *sll1626* and *slr1735* (listed in Table 1). (B) Total RNA isolated from cells grown in light was also used for negative controls (C -), in which no reverse transcriptase was added in the RT reactions prior to the PCR. Numbers on the left side indicate sizes in base pairs (bp).

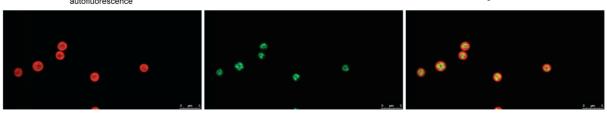
## SFM04

Cyanobacterial autofluorescence	GFP fluorescence	Merged channels	Cyanobacterial autofluorescence	GFP fluorescence	Merged channels
uri o			1.5 µm	· • • • •	
0.1 µm			1.7 µm	6 6 9 0 6 0	·••••••
0.3 µm		. • . •	1.8 µm	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	••••••
0.4 µm	ant a su	. • . •	1.8 µm	• • • •	·••••••
0.5 Jun		. • . •	2.0 µm		••••••
uri 3.0.		. • . •	2.2 µm	· • • • •	
0.8 June 10 Ju		. • * . • .	2.3 µm		••••••
uri 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	· · · · ·	••••••	2.4 µm		
1.0 µm	· • * . • .	••••••	2.5 µm		. • . •
1.2 µm • • •	· • * . •	••••••	2.7 µm	· * . · .	· · · · ·
1.3 µm	· • * . • .	•••••••	2.8 µm		
1.4 Jm	, • <sup>*</sup> , •		2.9 µm		<sup>1</sup>

Cyanobacterial autofluorescence

GFP fluorescence

Merged channels



Supplementary FIG. S2. The LexA::GFP distribution in live cells of *Synechocystis* sp. strain PCC 6803 as analyzed by confocal microscopy using a Z-stack series. The Z-axis was scanned 24 times over 2.9 $\mu$ m. In each set of images representing one particular plane, the cyanobacterial autofluorescence is depicted to the left, while the collected GFP signal is shown in the middle panel. The result of merging the signals from both channels is shown in the panel to the right. The three bottom images represent a magnification of plane "1.2 $\mu$ m", where the "hank shape" of the LexA::GFP signal can be visualized.