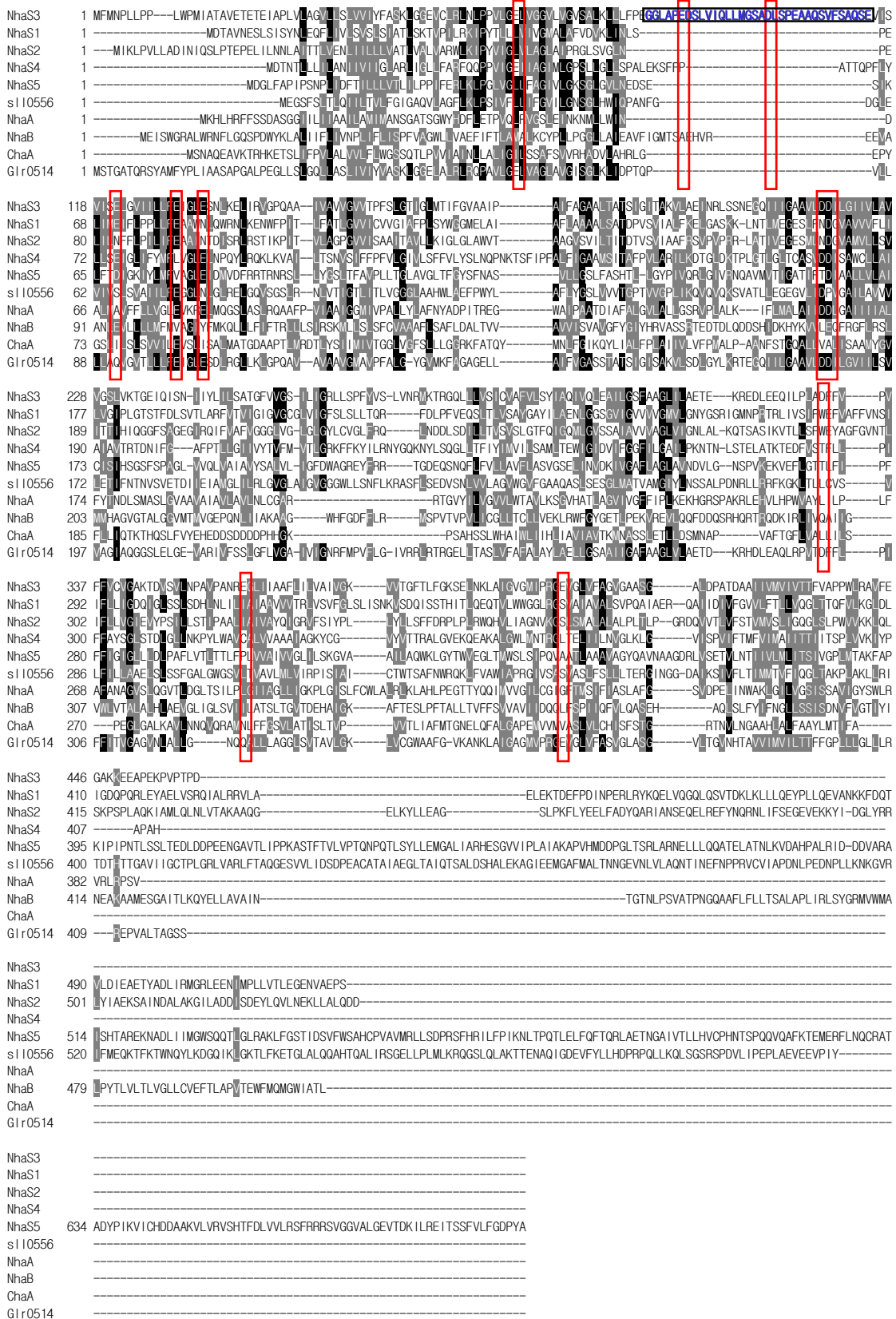


**Supplemental FIGURE. 1. Deduced amino acid sequence of *Synechocystis* NhaS3 compared to other Na<sup>+</sup>/H<sup>+</sup> antiporters from *Synechocystis*, *E. coli* and *Gloeobacter violaceus*.** NhaS3 contains a domain in its N-terminal region (GGLAPEDSLVIQLLMGSADLSPEAAQSVFSAQSE, see box), which is not found in the homologous Na<sup>+</sup>/H<sup>+</sup> antiporter of the cyanobacterium *Gloeobacter violaceus* that lacks a thylakoid membrane.



**Fig. S1.** Deduced amino acid sequence of *Synechocystis* NhaS3 compared to other Na<sup>+</sup>/H<sup>+</sup> antiporters from *Synechocystis*, *E. coli* and *Gloeobacter violaceus*. Multiple alignment of the amino acid sequences of NhaS3, NhaS1, NhaS2, NhaS4, NhaS5 and sll0556 from *Synechocystis* PCC 6803, NhaA, NhaB and ChaA from *E. coli*, and glr0514 from *Gloeobacter violaceus*.