

Supplemental Table 1 Oligo Primers

Primer	Sequence 5' to 3'	Description of use
CDEP1430	cacctaaggaggctttcttaatggataagagattacagc	Clone IPTG-inducible <i>rsiV</i> <sup>+</sup>
CDEP952	ccataatcttagatggatg	Clone IPTG-inducible <i>rsiV</i> <sup>+</sup>
CDEP1460	caccatggataagagattacagcaattaagag	Clone <i>gfp-rsiV</i> <sup>+</sup>
CDEP978	tcagttgatattaacaagcgag	Clone <i>rsiV</i> <sup>1-60</sup>
CDEP568	aagtcgactaaggagggtgaatttatgactataatagccgc	Clone IPTG-inducible <i>rasP</i>
CDEP569	aagcatgccttatttaaaactacatagcc	Clone IPTG-inducible <i>rasP</i>
CDEP1245	caccaagcttaaggaggatttatagatgttgccaaaaagaatcaaa tgg	Clone IPTG-inducible <i>pdaC</i>
CDEP1246	aacgtacgcttaaagtgttggccacc	Clone IPTG-inducible <i>pdaC</i>
CDEP1007	caccaacccggacgccgctcaggc	Clone <i>6xhis-rsiV</i> <sup>69-285</sup>
CDEP209	tgtctctgctggtgatctgg	LFH-KO <i>rasP::tet</i>
CDEP1575	caattgccctatagtgagtcgctccgaaaataatgataaacgc	LFH-KO <i>rasP::tet</i>
CDEP1576	ccagctttgtcccttagtgagttgcatggaacgat	LFH-KO <i>rasP::tet</i>
CDEP212	gcaagctctacaacttctgc	LFH-KO <i>rasP::tet</i>
CDEP615	aaaagcttaaggaggaaggatccatgggtccgctggctccgctgct ggttctggcatgagcaaaggagaagaac	Clone superfold GFP
CDEP618	aaagatctgctagcttagaattcgccagaaccagcagcggagcca gcggaaccctttagagctcatccatgc	Clone superfold GFP

**Figure S1: Examples of ECF factor activation and a model for  $\nu$  activation.**

Shown in green are proteases for Site-1 cleavage, in light blue the substrates, in dark blue the proteases for Site-2 cleavage, and in yellow transcription factors activated or released as a consequence of Site-2 cleavage. Red arrows point to the sites of cleavage on the substrates.

**Figure S2. GFP-RsiV localizes to the membrane.**

*B. subtilis* strains *P<sub>hs</sub>-gfp* (JLH370) and *P<sub>hs</sub>-gfp-rsiV* (JLH453) were grown to an OD of 0.6 before 1mM of IPTG was added. Cells were incubated for an additional 1 hour at 37°C. 5  $\mu$ l of culture were spotted on a 2% agarose pad and viewed using a fluorescent microscopy as previously described (1). Exposure time for images was 3 seconds. Images were taken at 12-bit, converted to JPEG and transferred to GIMP (GNU Image Manipulation Program) for crop and small contrast corrections.

1. **Tarry M, Arends SJR, Roversi P, Piette E, Sargent F, Berks BC, Weiss DS, Lea SM.** 2009. The *Escherichia coli* Cell Division Protein and Model Tat Substrate SufI (FtsP) Localizes to the Septal Ring and Has a Multicopper Oxidase-Like Structure. *Journal of Molecular Biology* **386**:504-519.