



Figure S1: The map of hybrid plasmid pPL_ABCDE_{Exen} [37]. Plasmid pPL_ABCDE_{Exen} is a motorless shuttle vector with two replication origins from pMW118 and pBS72. The reporter genes are *luxABCDE* from *Photobacterium luminescens*. The order of genes in the *lux*-operon and RBS upstream of each gene are optimized for *B. subtilis* expression. Resistance to trimethoprim (Tp^r), chloramphenicol (Cm^r), and ampicillin (Ap^r).

Table S1. List of primers used in the study. Italicized sequences are complementary to pPL_ABCDE_{Exen} around the *SacI* site and were used for Gibson assembly.

alkA _{dir}	<i>TAAAGAAGAGCTTTCAGGAATTCGTTAAATAATTATAAGAAAACCTCAGCTGG</i>
alkA _{rev}	<i>GGCCGCGGTACCGAGCTTGTAATAGCAAGATAACAAAATGAGTAAA</i>
mrgA _{Dir} mrgA _{Dir}	<i>TAAAGAAGAGCTTTCAGGAATTCGTTCCGATCGCTTTTTCCTTG</i>
mrgA _{Rev}	<i>GGCCGCGGTACCGAGCTGATCTGTTGACTTAATTATATCATATACT</i>
dinC _{Di}	<i>GCCGCGGTACCGAGCTTAATTACATTAAAGCAAACATA</i>
dinC _{Rev}	<i>G TAAAGAAGAGCTTTCAGGAATTCGAAACAGAACAAAGTGTTCTTTTTT</i>
prom _{rev}	CTGTCCCATGTCATTTCCTCC
prom _{dir}	ATTCATAGAGAGTCCTCCTTGCTT

The sequences of promoter regions used for constructing new biosensor plasmids by insertion into SacI site of pPL_ABCDE_{ex} are given below:

- *The mrgA gene promoter, which is inducible by oxidative stress*

133 bp fragment of *B. subtilis* 168 gDNA

ttccgacgcttttccttggtctgcgtgggagctctcctgaagaaaagctattcagctgatctaaattataattattataatttagtattgattttatttagtatatg
atataattaagtcaacagatc

- *The dinC gene promoter, which is inducible by DNA damages*

62 bp fragment of *B. subtilis* 168 gDNA

aaacagaacaagtgttctttttctattgaataccgaacgtatgtttgctttaatgaatta

- *The alkA gene promoter, which is inducible by DNA alkylation*

85 bp fragment of *B. subtilis* 168 gDNA

tgtaatagcaagataacaaaatgagtaaagatgattatgtgataaactaattcaaccagcgtgagtttcttataattatttaa