

S2 Table. Plasmids used in this study

Plasmid	Genotype ^a	Origin	Source or Reference
pBAD24	<i>bla araC P_{ara}::empty</i>	pBR/ColE1	[6]
pINT-ts	<i>bla repA(ts) cl857(ts) P_{λR}::int(λ)</i>	R6K	[7]
pKD46	<i>bla repA101(ts) araC P_{ara}::γ-β-exo</i>	pSC101	[8]
pMT12	<i>attHK022 tetA tetR lacI P_{lac}::nlpD^(S27D)</i>	R6K	This study
pMT20	<i>attHK022 tetA tetR lacI P_{lac}::nlpD⁽¹⁻³⁷⁹⁾</i>	R6K	[9]
pMT21	<i>attHK022 tetA tetR lacI P_{lac}::nlpD^(S27D)-mCherry</i>	R6K	This study
pMT94	<i>cat lacI P_{lac}::nativeRBS_ybgC_tolQRA</i>	pACYC/p15A	This study
pMT101	<i>attHK022 tetA tetR lacI P_{lac}::nlpD⁽¹⁻¹⁸⁹⁾-mCherry</i>	R6K	This study
pMT102	<i>attHK022 tetA tetR lacI P_{lac}::nlpD⁽¹⁻¹⁸⁹⁾</i>	R6K	This study
pMT103	<i>attHK022 tetA tetR lacI P_{lac}::nlpD⁽¹⁻¹¹⁵⁾-mCherry</i>	R6K	This study
pMT104	<i>attHK022 tetA tetR lacI P_{lac}::nlpD⁽¹⁻¹¹⁵⁾</i>	R6K	This study
pMT121	<i>attHK022 tetA tetR lacI P_{lac}::<i>ssdsbA-nlpD</i>⁽²⁷⁻³⁷⁹⁾</i>	R6K	This study
pMT147	<i>attHK022 tetA tetR lacI P_{lac}::<i>ssdsbA-nlpD</i>⁽²⁷⁻³⁷⁹⁾-mCherry</i>	R6K	This study
pMT149	<i>attHK022 tetA tetR lacI P_{lac}::nlpD⁽¹⁻³⁰⁾-mCherry</i>	R6K	This study
pMT178	<i>attHK022 tetA tetR lacI P_{lac}::<i>ssdsbA-nlpD</i>⁽¹⁰²⁻¹⁷⁵⁾-mCherry</i>	R6K	This study
pMT179	<i>attHK022 tetA tetR lacI P_{lac}::<i>ssdsbA-nlpD</i>⁽²⁵⁰⁻³⁷⁹⁾</i>	R6K	This study
pMT180	<i>attHK022 tetA tetR lacI P_{lac}::<i>ssdsbA-nlpD</i>⁽²⁵⁰⁻³⁷⁹⁾-mCherry</i>	R6K	This study
pMT181	<i>attHK022 tetA tetR lacI P_{lac}::<i>ssdsbA-nlpD</i>⁽¹⁸⁹⁻³⁷⁹⁾</i>	R6K	This study
pMT182	<i>attHK022 tetA tetR lacI P_{lac}::<i>ssdsbA-nlpD</i>⁽¹⁸⁹⁻³⁷⁹⁾-mCherry</i>	R6K	This study
pMT187	<i>aadA repA(ts) lacI^q P_{lac}::envC-LE Scel cl857 P_{λR}::i-scel</i>	pSC101	This study
pMT196	<i>attλ cat lacI P_{lac}::yraP⁽¹⁻¹⁹¹⁾</i>	R6K	This study
pMT197	<i>attλ cat lacI P_{lac}::yraP⁽¹⁻¹⁹¹⁾-mCherry</i>	R6K	This study

Plasmid	Genotype ^a	Origin	Source or Reference
pMT198	<i>attλ cat lacI P_{lac}::yraP^(VA-20,21-DE)</i>	R6K	This study
pMT199	<i>attλ cat lacI P_{lac}::yraP^(VA-20,21-DE)-mCherry</i>	R6K	This study
pMT209	<i>attλ cat lacI P_{lac}::^{ss}dsbA-yraP⁽²⁴⁻¹⁹¹⁾</i>	R6K	This study
pMT210	<i>attλ cat lacI P_{lac}::^{ss}dsbA-yraP⁽²⁴⁻¹⁹¹⁾-mCherry</i>	R6K	This study
pMT224	<i>bla araC P_{ara}::sulA</i>	pBR/ColE1	This study
pNP16	<i>attHK022 tetA tetR lacI^q P_{lac-m3}::amiC-GFP</i>	R6K	[5]
pNP20	<i>attHK022 tetA tetR lacI^q P_{lac}::nlpD⁽¹⁻³⁷⁹⁾-mCherry</i>	R6K	[5]
pTB102	<i>cat repA(ts) cl857(ts) P_{λR}::int(HK022)</i>	pSC101	[10]
pTU119	<i>bla lacI^q P_{T7}::h-sumo-nlpD⁽²⁷⁻³⁷⁹⁾</i>	pBR/ColE1	[11]

^a P_{ara}, P_{λR}, and P_{lac} indicate the arabinose, λR, and lactose promoters, respectively. P_{lac-m3} is a *lac* promoter derivative with TATATT as its -10 element. ^{ss}*dsbA* corresponds to the first 24 codons of *dsbA* encoding its export signal to the periplasm. Scel indicates the presence of a substrate site for the I-SceI homing endonuclease. Numbers in superscript parenthesis indicate the amino acids included in the relevant clones. Unless indicated, the ribosome binding site (RBS) used for all constructs is the strong RBS of phage T7 φ10 gene. Additionally, all mCherry fusion proteins contain a LEGPAGL peptide linker between the NlpD variant and mCherry protein.