

**Table S3.** Strains and plasmids used in this work.

<b>Strains / plasmids</b>	<b>Relevant features</b>	<b>Reference / source</b>
Strains		
BL21(DE3)	Overexpression strain F- <i>ompT</i> , <i>hsdSB</i> (rB-mB-) ( <i>p<sub>lac</sub>UV5::T7gene1</i> ), $\lambda$ (DE3)	Novagen
LOBSTR BL21(DE3)	F- <i>ompT</i> <i>hsdSB</i> (rB- mB-) <i>gal dcm</i> (DE3), carries genomically modified copies of <i>arnA</i> and <i>slyD</i>	Kerafast
BW25113	<i>lacI<sup>q</sup></i> <i>rrnB<sub>T14</sub></i> $\Delta lacZ_{WJ16}$ <i>hsdR514</i> $\Delta araBAD_{AH33}$ $\Delta rhaBAD_{LD78}$	(1)
BW25113 $\Delta lpp$ (AMM14)	BW25113 $\Delta lpp$ ::frt	This work
BW25113 $\Delta ldtABC$ (AMM28)	BW25113 $\Delta ldtA$ ::frt $\Delta ldtB$ ::frt $\Delta ldtC$ ::frt	(2)
BW25113 $\Delta ldtDE\Delta dpaA$	BW25113 $\Delta ldtD$ ::frt $\Delta ldtE$ ::frt $\Delta dpaA$ ::frt	(2)
BW25113 $\Delta 6LDT$ (AMM24)	<i>lacI<sup>q</sup></i> <i>rrnB<sub>T14</sub></i> $\Delta lacZ_{WJ16}$ <i>hsdR514</i> <i>araBAD</i> <sub>AH33</sub> $\Delta rhaBAD_{LD78}\Delta ldtA$ $\Delta ldtB$ $\Delta ldtC$ $\Delta ldtD$ $\Delta ldtE$ $\Delta dpaA$	(3)
BW25113 $\Delta dpaA$	BW25113 $\Delta dpaA$ ::frt	(4)
BW25113 $\Delta dpaA\Delta lpp$ (AMM30)	BW25113 $\Delta dpaA$ ::frt $\Delta lpp$ ::frt	This work
<i>araBp/ptC</i> $\Delta dpaA$	BW25113 $\Phi(kan\ arac\ arabp/ptC)1$ $\Delta dpaA$ ::frt	(4)
Plasmids		
pETMM82	pETMM82 derivative; expresses LdtD with an N-terminal DsbC and a 6xHis tag	(5)
pET28a-LdtE-his	LdtE <sup>1-334</sup> -His <sub>6</sub> , native signal peptide, Kan <sup>R</sup>	This work
pET29b-DpaA-his	PelBss- DpaA <sup>20-246</sup> -His <sub>6</sub> , Kan <sup>R</sup>	This work
pET29b-DpaA(C143A)-his	PelBss- DpaA <sup>20-246</sup> -His <sub>6</sub> C143A, Kan <sup>R</sup>	This work
pGS100	pGZ119EH derivative, contains TIR sequence downstream of ptac, Cam <sup>R</sup>	(6)
pGS124 (pDpaA)	pGZ119H derivative; expresses DpaA under the tac promoter; Cam <sup>R</sup>	(4)
pGS124-DpaA(C143A)	pGZ119H derivative; expresses DpaA(C143A); tac promoter; Cam <sup>R</sup>	This work
pDpaA(C143A)	DpaA(C143A), tac promoter; Cam <sup>R</sup>	
pTB63	<i>tetA</i> PftsQAZ::ftsQAZ	(7)
pCP20	FLP expression, temperature sensitive replication; Cam <sup>R</sup> and Amp <sup>R</sup> .	(1)

**References:**

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