SUPPLEMENTAL MATERIAL

TABLE S1

E. coli strains and plasmids used in this study

Strains or plasmids	Relevant characteristics	Source
***E. coli* strains**		
DH5α	*supE44,* Δ*lacU169* (Y80*lac*ZDM15), *hsdR17, recA1, gyrA96, thi1, relA1*	(1)
W3110	F^-, IN(rrnD-rrnE)1	(2)
MG1655	F^-, λ^-, rph^{-1}	(2)
MC4100	WT, Δ*ara*, Δ*leu*	(3)
RH166	MC4100, Δ*ara*, Δ*leu, lac*$^-$	(4)
Δ*ftsH*	W3110, *zad220::Tn10 sfhC21*Δ*ftsH3::kan*	(5)
Δ*lon*	RH166, Δ*lon::Tn10*	(6)
Δ*clpP*	MC4100, Δ*clpP::kan*	(6)
Δ*hslUV*	MC4100, Δ*hslUV::kan*	(7)
plasmids		
pGST-FtsH	pGEX-2T derivative encoding GST-FtsH	(8)
pMAL-C	Amp^r, P_{lac}, *lacI*; encodes for N-terminal His_6-MBP fusions	NEB
pMAL-C-FtsH	pMAL-C derivative encoding His_6-MBP-FtsH	(9)
pBO1748	pMAL-C derivative encoding His_6-MBP-FtsH-H417Y	This study
pBO1749	pMAL-C derivative encoding His_6-MBP-FtsH-E479D	This study
pBCSK(+)	Cm^r, P_{lac}, *lacZ´*	Stratagene
pBO966	pBCSK(+) derivative containing a NdeI restriction site	This study
pASK-IBA5(+)	Amp^r; P/O_{tet}, *tetR*; encodes for N-terminal Strep tag fusions	IBA GmbH
pBO1199	pASK-IBA5(+) derivative, the coding region for the Strep tag was replaced by *his$_6$-cspD*	(10)
pBO2554	pBO1199 derivative encoding His_6-Rsd	This study
pBO2553	pBO1199 derivative encoding His_6-PspA	This study
pBO2560	pBO1199 derivative encoding His_6-HisG	This study
pBO2876	pBO1199 derivative encoding His_6-YeiE	This study
pBO2874	pBO1199 derivative encoding His_6-Add	This study
pBO2875	pBO1199 derivative encoding His_6-AroG	This study
pBO2555	pBO1199 derivative encoding His_6-DadA	This study
pBO2873	pBO1199 derivative encoding His_6-IscS	This study
pBO2872	pBO1199 derivative encoding His_6-FdoH	This study
pBO2561	pBO1199 derivative encoding His_6-YfgM	This study
pBO1750	pASK-IBA5(+) derivative, the coding region for the Strep tag was replaced by *his$_6$-pyrH*; defect repression of AHT induction system mediates constitutive gene expression after AHT promoter region	This study
pBO1754	pBO1750 derivative; *pyrH* gene was removed	This study
pBO2596	pBO1750 derivative mediating constitutive expression of His_6-YfgM	This study

TABLE S2

Oligonucleotides used in this study

Name	Amplified gene	Template	Sequence (5´-3´)
H417Y.fw	*ftsH-H417Y*	pMAL-C-FtsH	GAGTCGACGGCTTACTACGAAGC
H417Y.rv			CGTAGTAAGCCGTCGACTCTTT
E479D.fw	*ftsH-E479D*	pMAL-C-FtsH	GTGGTCGACTGGCAGACGAGAT
E479D.rv			TAGATGATCTCGTCTGCCAGTCGACC
PspA.fw	*pspA*	gDNA	AAAATGTACAGGTATTTTTTCTCGCTTTGC
PspA.rv			AAAAAAGCTTTTATTGATTGTCTTGCTTCATT
HisG.fw	*hisG*	gDNA	AAAATGTACAACAGACAACACTCGTTTACG
HisG.rv			AAAAAAGCTTTCACTCCATCATCTTCTCA
DadA.fw	*dadA*	gDNA	AAAATGTACACGAGTTGTCATACTGGGAAG
DadA.rv			AAAAAAGCTTTTAGCTGTGTGCGCC
YfgM.fw	*yfgM*	gDNA	AAAATGTACAGAAATTTACGAGAACGAAAACG
YfgM.rv			AAAAAAGCTTTCAGATGGACAAATTATTAATTTTC
Rsd.fw	*Rsd*	gDNA	AAAATGTACACTTAACCAGCTCGATAACCTG
Rsd.rv			AAAAAAGCTTTCAAGCAGGATGTTTGAC
IscS3.fw	*iscS*	gDNA	AAAAGGTACCAAATTACCGATTTATCTCGAC
IscS.rv			AAAAAAGCTTTTAATGATGAGCCCATTC
AroG.fw	*aroG*	gDNA	AAAATGTACAAATTATCAGAACGACGATTTACGCATCA
AroG.rv			AAAAAAGCTTTTACCCGCGACGCGCTT
Add.fw	*add*	gDNA	AAAATGTACAATTGATACCACCCTGCCA
Add3.rv			AAAAGCCGGCTTACTTCGCGGC
YeiE.fw	*yeiE*	gDNA	AAAATGTACACACATCACCCTCCGGCAG
YeiE.rv			AAAAGCCGGCTTAACGCGGCAC
FdoH.fw	*fdoH*	gDNA	AAAATGTACAGCTTATCAATCTCAAGATATCATTCG
FdoH.rv			AAAAAAGCTTTCATTTGCGCTCCTCG

For each construct, the forward and reverse oligonucleotides are given in succession. Restriction sites used for cloning or selection are underlined.

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