

Matusiak I. et al. supplemental material

Table S1. Constructs used in the study

Constructs	Relevant genotype	Source
Constructs used in <i>E. coli</i> BTH system		
pUT18C	pUC replicon, p <sub>lac</sub> promoter, ampicillin resistance, IPTG-inducible, T18 fragment of <i>cyaA</i> gene (encoding 225 to 399 amino acids)	(Karimova et al., 1998)
pKT25	P15A replicon, p <sub>lac</sub> promoter, kanamycin resistance, IPTG-inducible T25 fragment of <i>cyaA</i> gene (encoding 1- 224 amino acids)	(Karimova et al., 1998)
pKT25 <i>parA</i>	pKT25 derivative containing <i>M. smegmatis parA</i> gene	(Ginda et al., 2013)
pKT25 <i>parAT3A</i>	pKT25 derivative containing <i>M. smegmatis parAT3A</i> gene	(Pióro et al., 2019)
pKT25 <i>parAK44A</i>	pKT25 derivative containing <i>M. smegmatis parAK44A</i> gene	(Pióro et al., 2019)
pKT25 <i>parAD68A</i>	pKT25 derivative containing <i>M. smegmatis parAD68A</i> gene	(Pióro et al., 2019)
pKT25 <i>parAG40V</i>	pKT25 derivative containing <i>M. smegmatis parAG40V</i> gene	(Pióro et al., 2019)
pKT25 <i>parAR219E</i>	pKT25 derivative containing <i>M. smegmatis parAR219E</i> gene	(Pióro et al., 2019)
pKT25 <i>parB</i>	pKT25 derivative containing <i>M. smegmatis parB</i> gene	(Ginda et al., 2013)
pUT18C <i>divIVA</i>	pUT18C derivative containing <i>M. smegmatis divIVA</i> gene	(Ginda et al., 2013)
pUT18C <i>divIVA I-II</i>	pUT18C derivative containing a fragment of <i>M. smegmatis divIVA</i> gene used for the production of T18C-DivIVAI-II (amino acids 1-72)	(Ginda et al., 2013)
pUT18C <i>divIVA II-III</i>	pUT18C derivative containing a fragment of <i>M. smegmatis divIVA</i> gene used for the production of T18C-DivIVAII - III (amino acids 1-143)	(Ginda et al., 2013)
pUT18C <i>divIVA III-IV</i>	pUT18C derivative containing a fragment of <i>M. smegmatis divIVA</i> gene used for the production of T18C-DivIVAIII - IV (amino acids 68-272)	(Ginda et al., 2013)
pUT18C <i>divIVA IV</i>	pUT18C derivative containing a fragment of <i>M. smegmatis divIVA</i> gene used for the production of T18C-DivIVAIV (amino acids 139-272)	(Ginda et al., 2013)
pKT25 <i>divIVA</i>	pKT25 derivative containing <i>M. smegmatis divIVA</i> gene	(Ginda et al., 2013)
pUT18C <i>msmeg_5597</i>	pUT18C derivative containing <i>M. smegmatis msmeg_5597 (papM)</i> gene	This study
pKT25 <i>msmeg_5597</i>	pKT25 derivative containing <i>M. smegmatis (msmeg_5597) papM</i> gene	This study
Constructs used for protein purification		
pGEX-6P-2	pGEX-6P-2 ampicillin resistance, GST-tag vector	Lab stock, University of Wrocław

pGEX-6P-2 <i>parA</i>	pGEX-6P-2 derivative containing <i>M. smegmatis parA</i> gene	(Jakimowicz et al., 2007)
pET28a	pET28a kanamycin resistance, His-tag vector	Lab stock, University of Wrocław
pET28a <i>papM</i>	pET28a derivative containing <i>M. smegmatis papM</i> gene	This study
Constructs used for colocalization microscopy in <i>E. coli</i>		
pETDuet-1	ampicillin resistance vector, two multiple cloning sites, the pBR322-derived ColE1 replicon, <i>lacI</i> gene	Lab stock, University of Wrocław
pJP108 <i>divIVA</i> <sub>MS</sub>	pJP108 containing <i>icsA507-620-mcherry</i> fused with <i>M. smegmatis divIVA</i> gene	(Pióro et al., 2019)
pETDuet- <i>pknB</i> <sub>KD</sub>	pETDuet-1 derivative containing fragment of <i>M. smegmatis pknB</i> gene encoding kinase domain (11-274 aa)	This study
pETDuet- <i>mcherry-divIVA</i>	pETDuet-1 derivative containing <i>icsA507-620-mcherry</i> fused with <i>M. smegmatis divIVA</i> gene	This study
pETDuet- <i>pknB</i> <sub>KD</sub> <i>mcherry-divIVA</i>	pETDuet-1 derivative containing fragment of <i>M. smegmatis pknB</i> gene encoding kinase domain (11-274 aa) (MCS1) and <i>divIVA</i> gene fused with <i>mcherry</i> (MCS2)	This study
pETDuet- <i>pknB</i> <sub>KD</sub> <i>mcherry-divIVAT74A</i>	pETDuet-1 derivative containing fragment of <i>M. smegmatis pknB</i> gene encoding kinase domain (11-274 aa) (MCS1) and <i>divIVAT74A</i> gene fused with <i>mcherry</i> (MCS2)	This study
pETDuet- <i>ics-mcherry</i>	pETDuet-1 derivative containing <i>icsA507-620-mcherry</i>	This study
pACYC-Duet-1	chloramphenicol resistance vector, two multiple cloning sites, the P15A replicon, <i>lacI</i> gene	Lab stock, University of Wrocław
pACYC- <i>egfp-parA</i>	pACYCDuet-1 derivative containing <i>egfp</i> gene fused with <i>M. smegmatis parA</i> gene	(Pióro et al., 2019)
pACYC- <i>papM-mT2</i>	pACYCDuet-1 derivative containing <i>M. smegmatis papM</i> gene fused with <i>mturquoise2</i>	This study
pACYC- <i>papM-mT2; egfp-parA</i>	pACYCDuet-1 derivative containing <i>M. smegmatis papM</i> gene fused with <i>mturquoise2</i> (MCS1) and <i>egfp</i> gene fused with <i>M. smegmatis parA</i> gene (MCS2)	This study
Constructs used for <i>M. smegmatis</i> modifications		
p2Nil	kanamycin resistance, <i>oriE</i> , suicide vector for allelic replacement	(Parish and Stoker, 2000)
pGOAL	ampicillin resistance, <i>oriE</i> , selective Pacl cassette with <i>lacZ</i> , <i>sacB</i> and <i>kanR</i> genes	(Parish and Stoker, 2000)
p2NilΔ <i>papM</i> GOAL	p2Nil derivative for deletion of <i>papM</i> gene	This study
p2Nil <i>sr2-mT2</i> GOAL	p2Nil containing <i>mTurquoise2</i> gene fused with <i>lrr2</i>	(Kołodziej et al., 2021)
pMV306p <sub>ami</sub>	pMV306 containing acetamide inducible promoter p <sub>ami</sub>	(Ginda et al., 2013)
pMV306p <sub>ami</sub> <i>papM</i>	pMV306p <sub>ami</sub> derivative containing <i>M. smegmatis papM</i> gene	This study

pMV <sub>nat</sub> <i>egfp-parA</i>	pMV306 <sub>p<sub>ami</sub></sub> derivative containing <i>egfp</i> gene fused with <i>parA</i> gene	(Ginda et al., 2013)
pMV <sub>nat</sub> <i>PAmcherry-parA</i>	pMV306 <sub>p<sub>ami</sub></sub> containing <i>PAmcherry</i> gene fused with <i>parA</i> under its native promoter	(Pióro et al., 2019)
pKW08 <sub>p<sub>tet</sub></sub>	pKW08 containing tetracycline inducible promoter <i>p<sub>tet</sub></i>	Lab stock, University of Wrocław
pKW08 <sub>p<sub>tet</sub></sub> <i>mcherry-divIVA</i>	pKW08 <sub>p<sub>tet</sub></sub> derivative containing <i>mcherry</i> gene fused with <i>divIVA</i>	This study

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