Supplementary information S1 (table) | **Main cell elongation and division proteins**

Process	*E. coli*	*B. subtilis*	Mycobacteria	Function
Elongation	PBP1a[18]	PBP1 (REF. 129)	PonA1 (REF. 29)	Peptidoglycan synthase
	PBP1b?[18]		PonA2?	Peptidoglycan synthase
	PBP2 (REF. 18)	PBP2a[126]		Peptidoglycan synthase
		PbpH[126]		Peptidoglycan synthase
			LdtAB?[32]	Peptidoglycan synthase
	Spr[127]			Peptidoglycan hydrolase
	YdhO[127]			Peptidoglycan hydrolase
	YebA[127]			Peptidoglycan hydrolase
		CwlO[128]		Peptidoglycan hydrolase
		LytE[128]		Peptidoglycan hydrolase
	MreBCD[18]	MreBCD[130]		Guides elongation complex
		MreBH[130]		Guides elongation complex
		Mbl[130]		Guides elongation complex
			Wag31 (REF. 24)	Anchors elongation complex
			CwsA[26]	Structural protein
Division	PBP1b[18]	PBP1 (REF. 126)	PonA1 (REF. 29)	Peptidoglycan synthase
	PBP1a?[18]			Peptidoglycan synthase
	PBP3 (REF. 18)	PBP2b[126]	PBPB[42]	Peptidoglycan synthase
			PBPA[31]	Peptidoglycan synthase
	AmiABC[18]	LytC[133]		Peptidoglycan hydrolase
		LytD[133]		Peptidoglycan hydrolase
		LytF[133]	RipA[47]	Peptidoglycan hydrolase
			RpfB[48]	Peptidoglycan hydrolase
	ZipA[18]			Z ring stabilization
	ZapABCD[18,135]	ZapA[35]		Z ring stabilization
	FtsA[18]	FtsA[35]	FhaB[41]	Z ring stabilization
	FtsP[134]			Z ring stabilization
		SepF[35]		Z ring stabilization
	FtsQLB[18]	DivIBC[132]	FtsQ[23]	Structural protein
	FtsW[18]	FtsW[35]	FtsW[23]	Structural protein
	FtsZ[18]	FtsZ[35]	FtsZ[23]	Forms the Z ring
	FtsN[18]			Structural protein
			CrgA[43]	Structural protein
			CwsA[26]	Structural protein

All references are numbered according to main article with the exception of one additional reference (number 135).

135. Durand-Heredia, J., Rivkin, E., Fan, G., Morales, J. & Janakiraman, A. Identification of ZapD as a cell division factor that promotes the assembly of FtsZ in *Escherichia coli. J. Bacteriol.* **194**, 3189–3198 (2012).