Table S1 - Plasmids and Primers used in this study

Plasmids	Description	Reference
pKOR1	empty plasmid for allelic replacement	1
pKOR1 +pbp4	*pKOR1* deletion construct for *pbp4* gene	This study
pTX$_{\Delta}$	empty plasmid for constitutive expression	2
pTX$_{\Delta}$*+pbp4* (SF8300)	constitutively expressed *pbp4* from SF8300 strain	This study
pTX$_{\Delta}$*+pbp4* (SRB)	constitutively expressed *pbp4* from SRB strain	This study
pTX$_{\Delta}$*+pbp4* (SRT)	constitutively expressed *pbp4* from SRT strain	This study

Primers	Sequence (5'-3')	Use
PBP4-P1	GGGGACAAGTTTGTACAAAAAAGCAGGCTAGTTTGCAATTTCAGATTGTGTACTTGTCGATATCTTTTGCATAATACGACC	*pbp4* deletion
PBP4-P2	AAAGCGTTAATCTTCCCTTTTCCAATTCTTAAATATTCCCTAAAAGC	*pbp4* deletion
PBP4-P3	AAAAGGGAAGATTAACGCTTTAACATACTAAAAACGGACAAGTTGCACATTATAAAGCTGCGAAACTTGTCCG	*pbp4* deletion
PBP4-P4	GGGGACCACTTTGTACAAGAAAGCTGGGTGAAGATTTTAATAGATATATCACAGAAATTATGAAAATAAGACAACG	*pbp4* deletion
PBP4-*BamH1* -for	TAAGGATCCGAAAAGGGAAGATTAACGCTTTATGAAAAATTTAATATC	*pbp4* cloning in *pTX*$_{\Delta}$
PBP4-*Mlu1* -rev	TAACACGCGTTATTATAAAATAAATATAAAACGGACAAG	*pbp4* cloning in *pTX*$_{\Delta}$
PBP4 pt. mut P1	GGGGACAAGTTTGTACAAAAAAGCAGGCGAGTAAGTTTGCTCTTCGTACAAACATTATAACACCTTTAGCTACACACG	*pbp4* point mutation
PBP4 E183A mut 1	TACACATTTCGTCAATCCAACGGGTGCTGCAAATTCAAGATTACGTACATTTGCACC	*pbp4* point mutation
PBP4 E183A mut 2	TCTTGAATTTGCAGCACCCGTTGGATTGACGAAATGTGTATTTTTCATTC	*pbp4* point mutation
PBP4 F241R mut 1	ACGTATTACACACGCAACTTTTCATTGGAAGGTGCAAAAATGAGTTTGC	*pbp4* point mutation
PBP4 F241R mut 2	TTCCAATGAAAAGTTGCGTGTGTAATACGTAACTGCATGCGTTGTTGGTG	*pbp4* point mutation
PBP4 pt. mut P2	GGGGACCACTTTGTACAAGAAAGCTGGGTAGAAGGCATTTCGACGACTAAAATCAAACAAGAATTATATGGTAAAGATGC	*pbp4* point mutation
AcrB pt. mut P1	GGGGACAAGTTTGTACAAAAAAGCAGGCAGAAAATGGTATTTCTGCAAGTCAACTTGCAATGCACTTGAATGAAAACTTACCAG	*acrB* point mutation
AcrB I960V mut 1	TAGTAACAAATGCCGTTGTGTTAATAGACCGTGTTATTAATAATG	*acrB* point mutation
AcrB I960V mut 2	TAACACGGTCTATTAACACAACGGCATTTGTTACTACGATTCC	*acrB* point mutation
AcrB pt. mut P2	GGGGACCACTTTGTACAAGAAAGCTGGGTCATAAAAGTAGTCAATATCATGACCGCTTTTATGGCTTTTATATTATCTATCG	*acrB* point mutation
GdpP pt. mut P1	GGGGACAAGTTTGTACAAAAAAGCAGGCATCGATTTAAGTTTGAATTTGAAGCGAATCATGAAAAATAATTCTAAAAAGTG	*gdpP* point mutation
GdpP N182K mut 1	ACATTATTTTTAGATAAATACGATGAGATTACGCAAAATATGAATG	*gdpP* point mutation
GdpP N182K mut 2	TTGCGTAATCTCATCGTATTTATCTAAAAATAATGTCGCAATG	*gdpP* point mutation
GdpP pt. mut P2	GGGGACCACTTTGTACAAGAAAGCTGGGTTATGCTTCTAAATTATTCATCATTGCAAATCTAGACACACCGATTGCTGCACC	*gdpP* point mutation

Figure S1

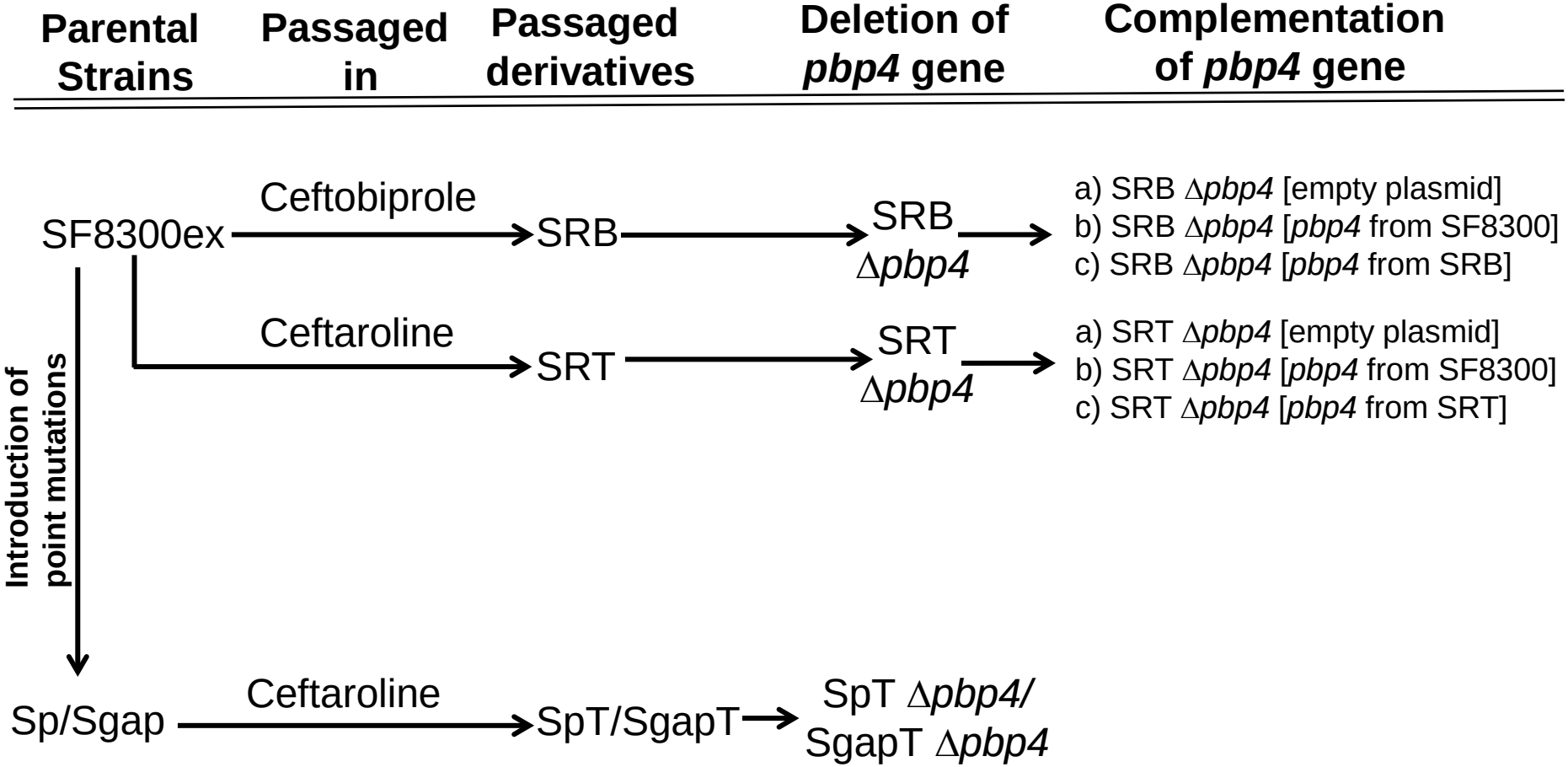

Figure S1: Scheme of passaging experiments against new generation cephalosporins.

References

1. **Bae T, Schneewind O.** 2006. Allelic replacement in *Staphylococcus aureus* with inducible counter-selection. Plasmid **55:**58-63.
2. **Wang R, Braughton KR, Kretschmer D, Bach TH, Queck SY, Li M, Kennedy AD, Dorward DW, Klebanoff SJ, Peschel A, DeLeo FR, Otto M.** 2007. Identification of novel cytolytic peptides as key virulence determinants for community-associated MRSA. Nat Med **13:**1510-1514.