

Table S1. Primary structures of the peptides.

Compound	Primary sequence
DK5	IKKILSkIKKLL-NH ₂
DAL	YaGFLR
CAR	βAH
CAR3	βAH βAH βAH
COMB1	EGLEPG
DK5-PEG-DAL	IKKILSkIKKLL-PEG-YaGFLR
DAL-PEG-DK5	YaGFLR-PEG- IKKILSkIKKLL -NH ₂
CAR-PEG-DK5	βAH-PEG- IKKILSkIKKLL -NH ₂
CAR3-PEG-DK5	βAHβAHβAH-PEG- IKKILSkIKKLL -NH ₂
COMB1-PEG-DK5	EGLEPG-PEG- IKKILSkIKKLL -NH ₂

D-analogues of the amino acids are marked as small bold letters; βA refers to β-Ala amino acid residue.

Table S2. Characterization of methicillin resistant *S. aureus* (MRSA) clinical isolates.

MRSA strain ID	Source	Macrolide resistance phenotype	Other antibiotic resistance phenotype
56A1	skin	cMLS _B	P, C, CL, DO*, G, TOB, K
52B	skin	lack of resistance	P
1694	blood	cMLS _B	P, TE, CIP, CN, AK, TOB, DO, K
2492	blood	cMLS _B	P, TE, CIP, AK*, TOB, K
2706	blood	cMLS _B	P, CIP, TOB, K
2872cv	blood	cMLS _B	P, TE, CIP, CN, AK, TOB, DO, K
3417	blood	cMLS _B	P, K*
4187	blood	lack of resistance	P
6674	blood	cMLS _B	P, TE, CIP, CN, AK, TOB, DO, K
7219	blood	cMLS _B	P, TE, CIP, CN, AK, TOB, DO, K
7501	blood	iMLS _B	P, CIP, TOB, K, DA
7569	blood	iMLS _B	P, CIP, AK*, TOB, K, DA
7718	blood	cMLS _B	P, CIP, TOB, K

MLS_B, resistance to macrolides, lincosamides and streptogramins B; the prefix letter refers to the constitutive expression of this phenotype (cMLS_B) or inducible expression of the phenotype (iMLS_B);

AK, amikacin; C, chloramphenicol; CIP, ciprofloxacin; CL, clindamycin; CN, cephalexin; DA, dalfopristin; DO, doxycycline; G, gentamycin; K, kanamycin; P, penicillin; TE, tetracycline; TOB, tobramycin; XXX*, intermediate resistance.