

Supplementary material

**Mechanism of action and therapeutic potential of the  $\beta$ -hairpin antimicrobial peptide capitellacin from the marine polychaeta *Capitella teleta***

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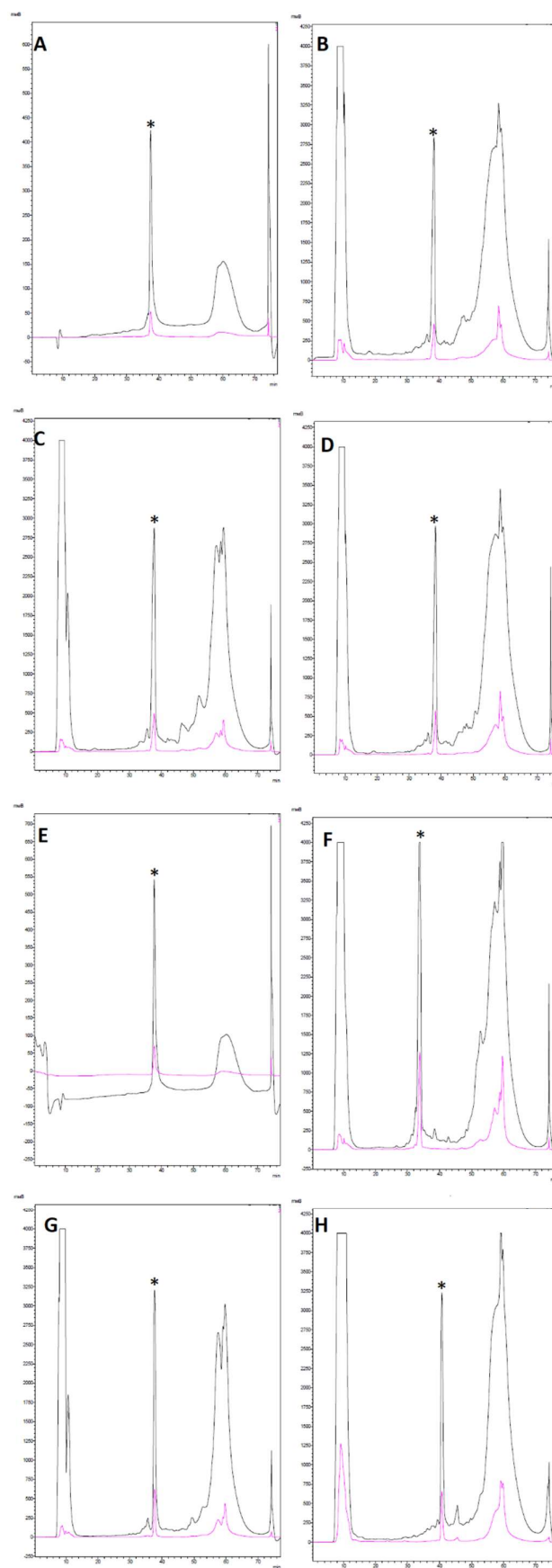


Figure S1. Reverse-phase high-performance liquid chromatography (RP-HPLC) purification of A) Tachyplesin-1; B) Capitellacin; C) CT2; D) CT3; E) CT4; F) CT5; G) CT6; H) CT7. The fraction of recombinant peptide is marked with a black asterisk.

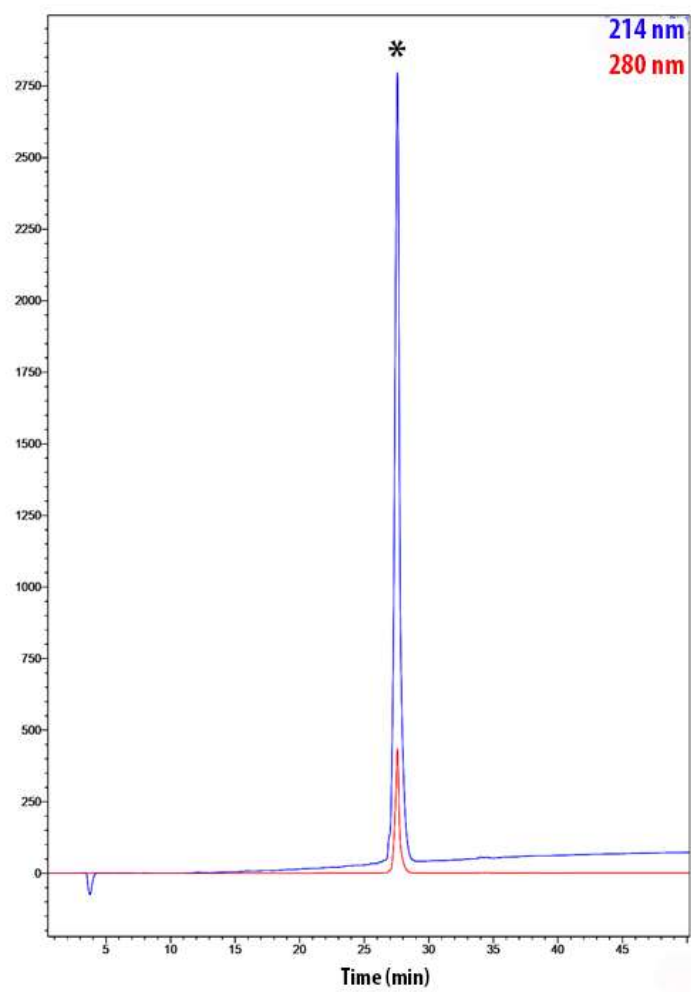


Figure S2. Repurification of peptides was performed using the analytical column (Symmetry 300 C18) at a flow rate of 1 mL/min in a linear gradient of solution B (80% acetonitrile, 0.1% TFA) in solution A (5% acetonitrile, 0.1% TFA): 0-100% for 50 min. (capitellacin is given as an example).

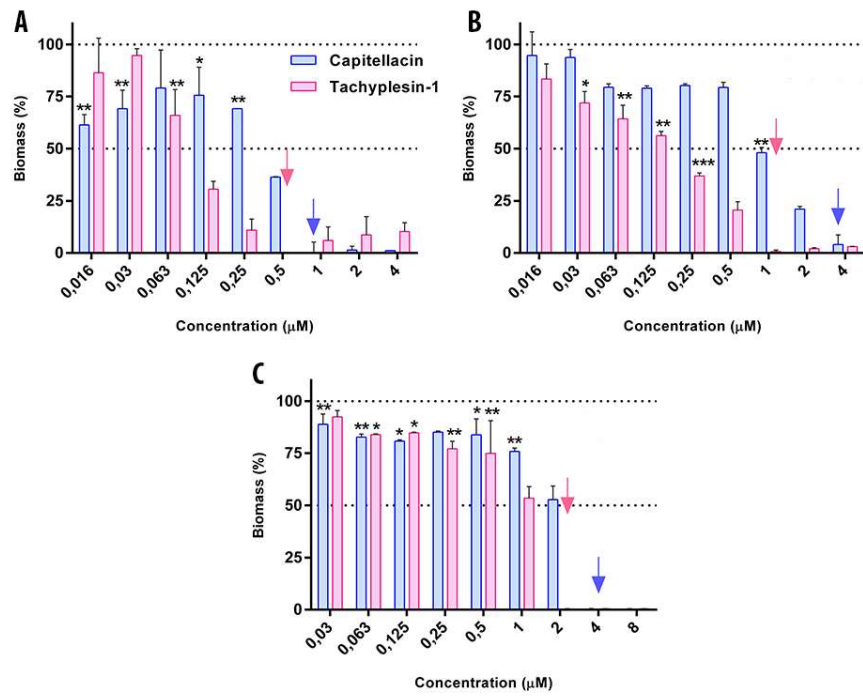


Figure S3. Anti-biofilm activity of capitellacin and tachyplesin-1 against A) *A. baumannii* XDR CI 2675; B) *K. pneumonia* ATCC 700603; C) *P. aeruginosa* XDR CI 1995. (CI, clinical isolate. MDR, multidrug resistant strain. XDR, extensively drug resistant strain). Up arrow is MIC of peptide.  $\pm$  SD of at least two independent experiments, statistically significant differences vs. the control: \*  $p \leq 0.05$ , \*\*  $p \leq 0.01$ , \*\*\*  $p \leq 0.001$ .