

Identification and rational design of a novel antibacterial peptide dermaseptin-AC from the skin secretion of the red-eyed tree frog *Agalychnis callidryas*

Supplement materials

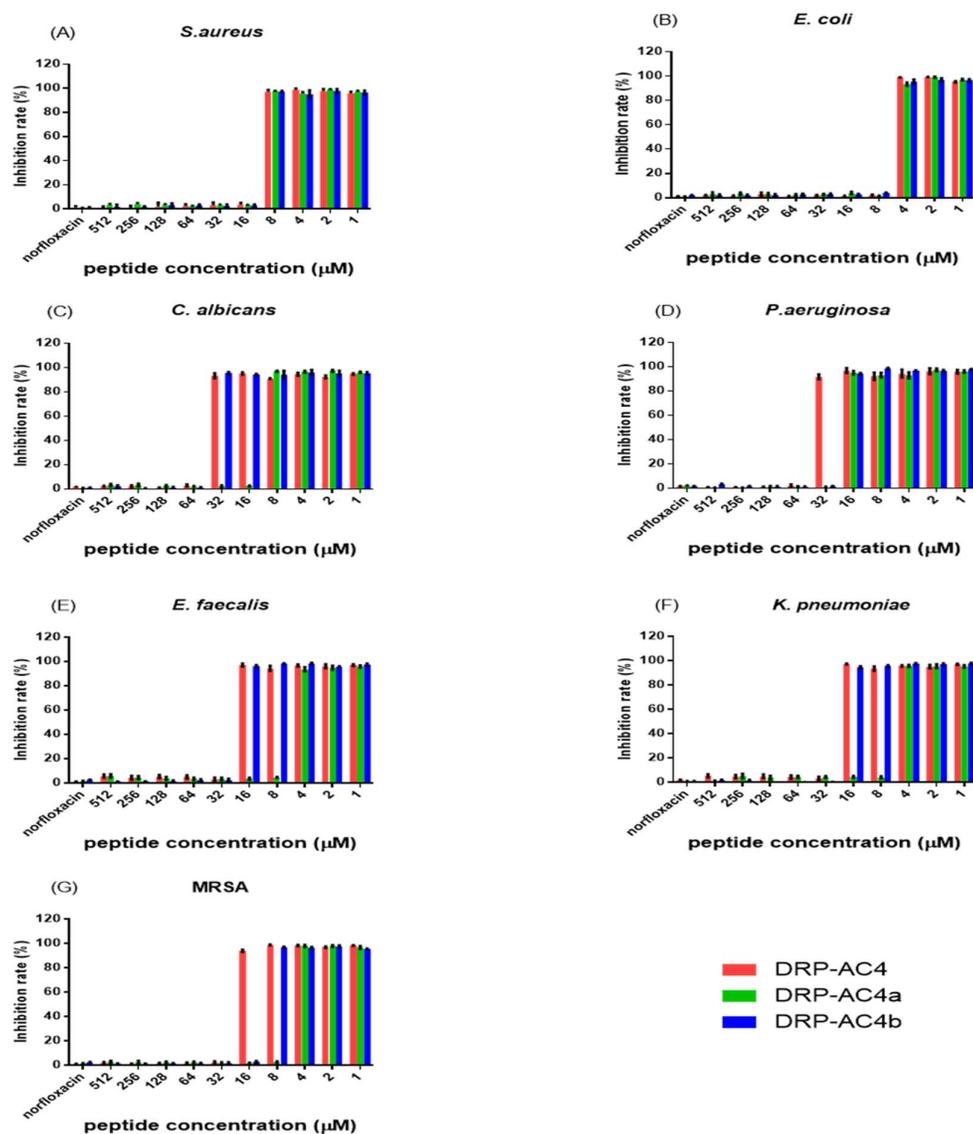


Figure S1 Inhibitory effects of DRP-AC4, DRP-AC4a and DRP-AC4b against (a) *S. aureus*, (b) *E. coli*, (c) *C. albicans*, (d) *P. aeruginosa*, (e) *E. faecalis*, (f) *K. pneumoniae* and (g) MRSA in a range of concentrations from 512 μM to 1 μM. Data represent means ± SEM.

MBICs against biofilm-forming *S. aureus*

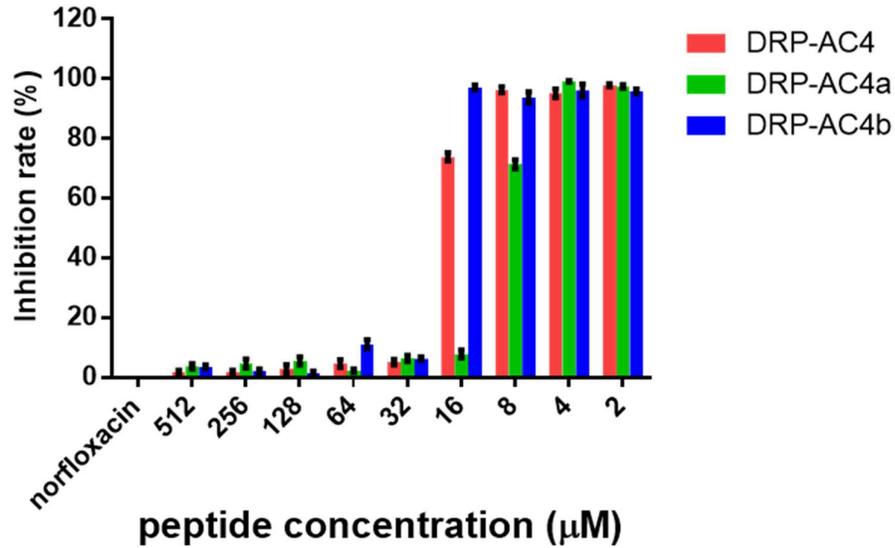


Figure S2 Inhibition effects of DRP-AC4 (red), DRP-AC4a (green) and DRP-AC4b (blue) against the biofilm formed by *S. aureus*. Data represent means \pm SEM.

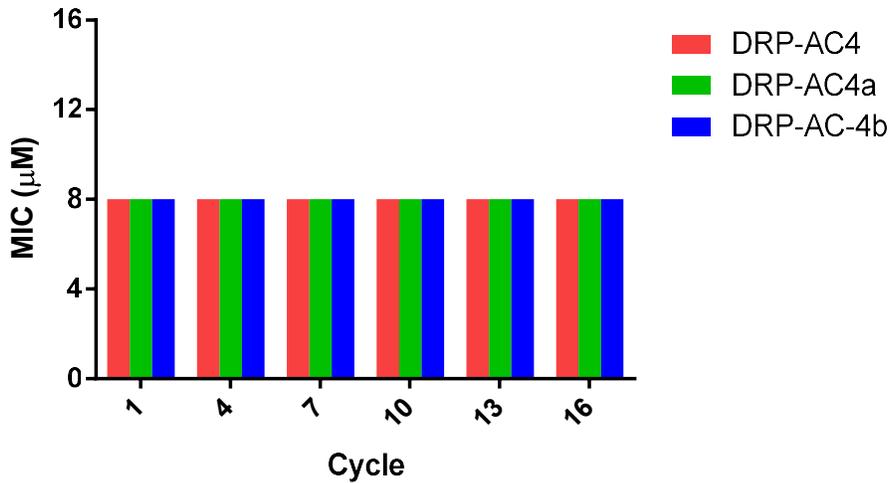
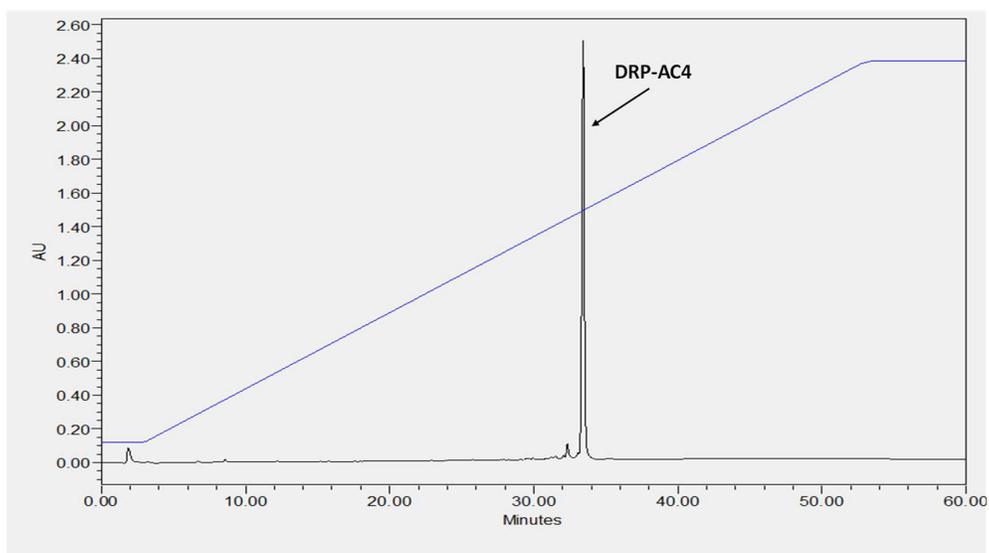
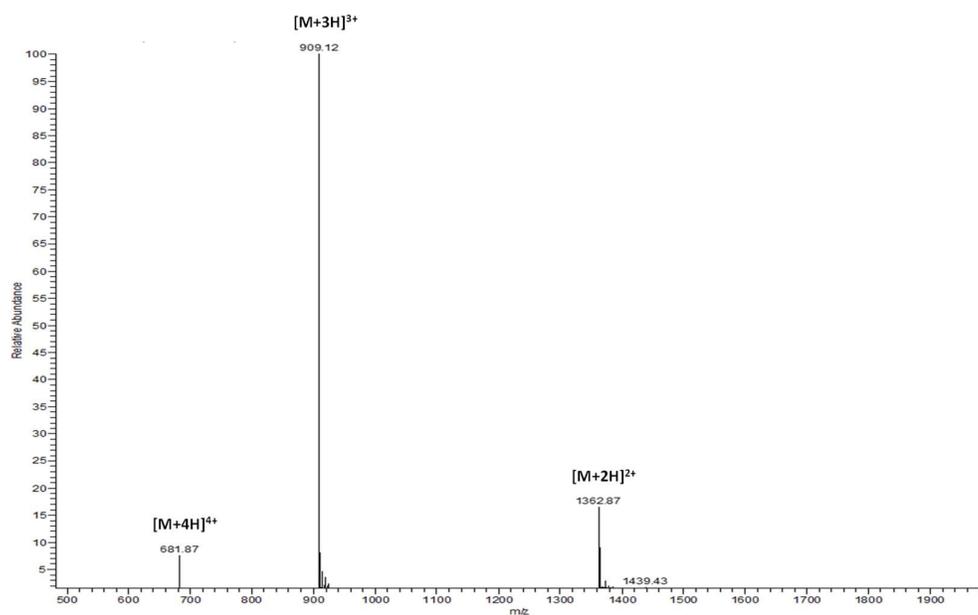


Figure S3 Assessment of resistant induction of DRP-AC4 (red), DRP-AC4a (green) and DRP-AC4b (blue) in *S. aureus* after 16 passages. The $1/2^*MIC$ bacterial suspension was further cultured after antibacterial assay. The vertical axis represented MIC data and the horizontal axis represented the number of passages.

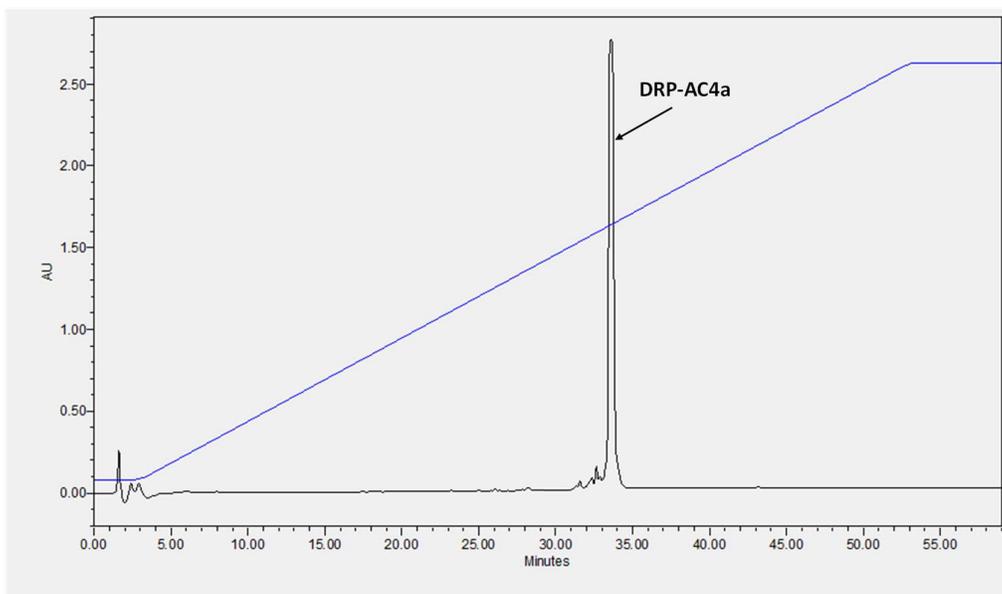


(a)

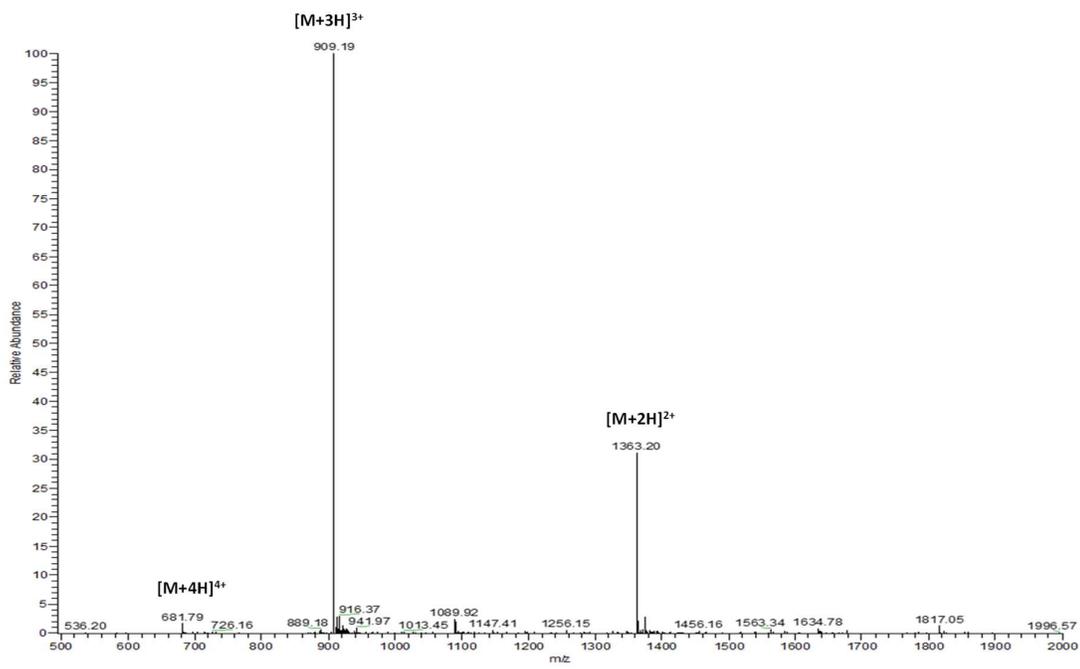


(b)

Figure S4 Reverse-phase HPLC chromatogram (a) and full scan mass spectrum (b) of purified DRP-AC4. The acetonitrile gradient is indicated by solid line. Multiple charged ions: $[M+2H]^{2+}$, $[M+3H]^{3+}$ and $[M+4H]^{4+}$.

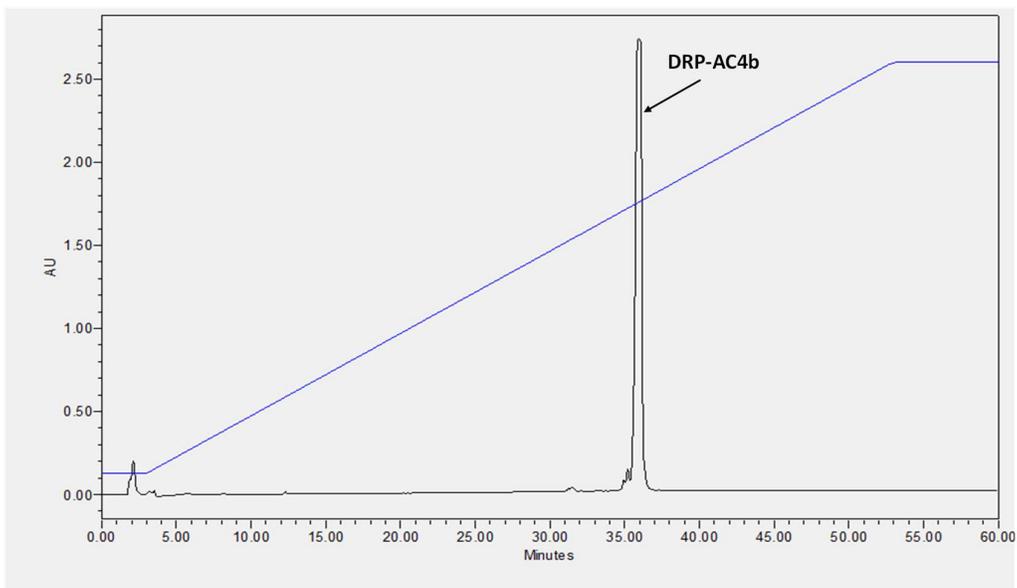


(a)

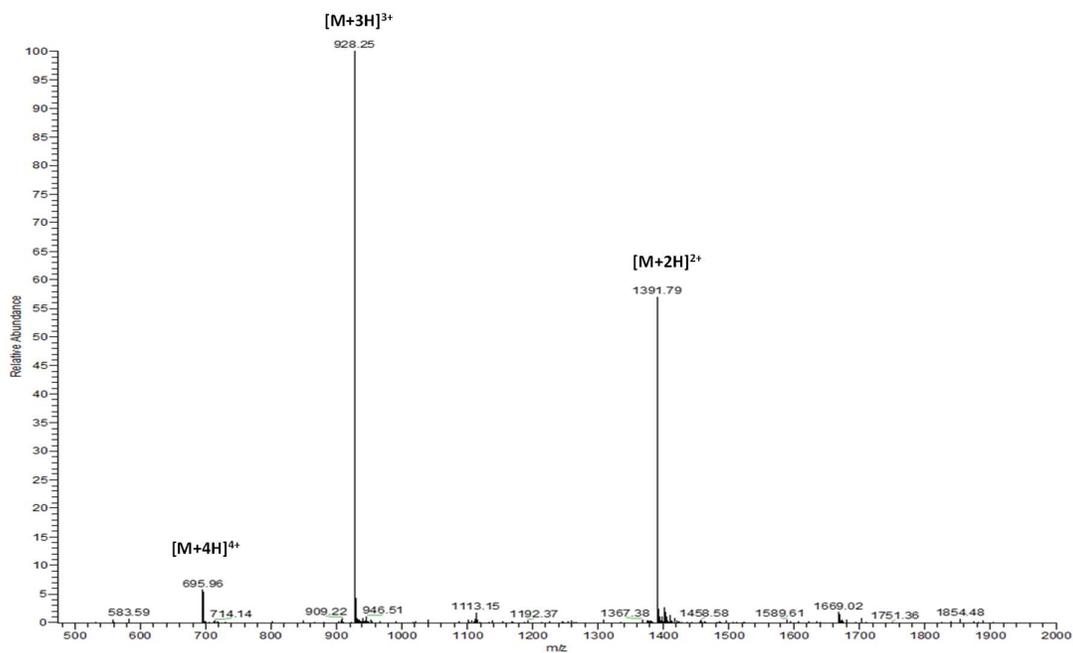


(b)

Figure S5 Reverse-phase HPLC chromatogram (a) and full scan mass spectrum (b) of purified DRP-AC4a. The acetonitrile gradient is indicated by solid line. Multiple charged ions: $[M+2H]^{2+}$, $[M+3H]^{3+}$ and $[M+4H]^{4+}$.



(a)



(b)

Figure S6 Reverse-phase HPLC chromatogram (a) and full scan mass spectrum (b) of purified DRP-AC4b. The acetonitrile gradient is indicated by solid line. Multiple charged ions: [M+2H]²⁺, [M+3H]³⁺ and [M+4H]⁴⁺.