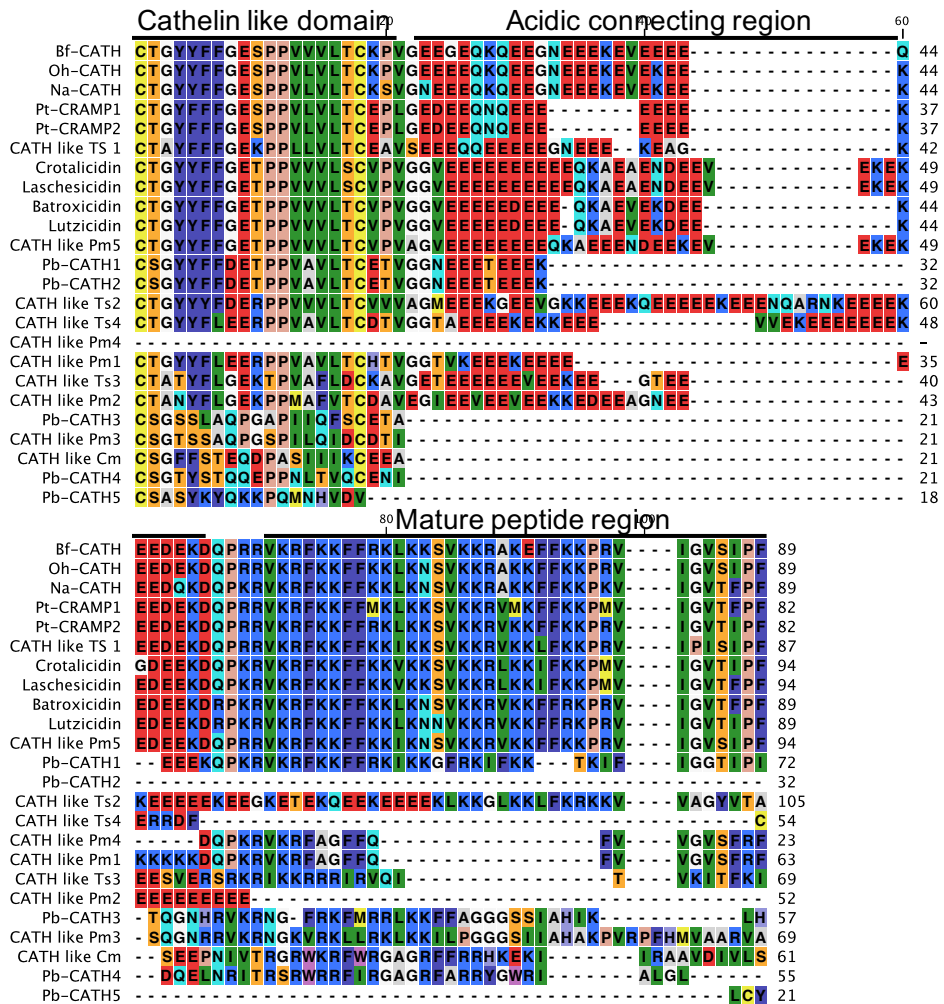


Supplementary Figure 1. Helical wheel projection of python cathelicidin-derived peptides. Helical wheel projection diagrams created using the synthesized amino acid sequences of Δ Pb-CATH1 (A), Pb-CATH3 (B), and Δ Pb-CATH4 (C). Hydrophobic amino acids are shown in yellow and grey. Hydrophilic amino acids are shown in purple and blue. The size of the arrow (\downarrow) represents the level of hydrophobicity. The numbers correspond to the numerical order of amino acids in the synthesized peptides.



Supplementary Figure 2. Analysis of the sequences and structural conservation of the region corresponding to the cathelin-like domain junction and mature peptide of available snake cathelicidins. A multiple sequence alignment was generated using the corresponding sequences of all available snake cathelicidins.

Table S3. Antimicrobial activity of *Python bivittatus* cathelicidin-derived peptides against *Streptococcus iniae* from the agar disk diffusion method.

Antimicrobial Agent	MIC ($\mu\text{g/ml}$)		
	Susceptible	Intermediate	Resistant
Pb-CATH1	-	-	≥ 32
Pb-CATH3	-	-	≥ 32
Pb-CATH4	-	-	≥ 32
Ampicillin [#]	≤ 0.25	-	-
Gentamicin [#]	≤ 1	-	-

[#]Control antibiotics showed 22-23mm zone diameter at corresponding MIC. Because that CLSI susceptibility breakpoints for *S. iniae* is not available, the values of *S. agalactiae* for benzylpenicillin was adopted.