

Data Sheet

Product Name:	Human β -defensin-1
Cat. No.:	CS-0129412
CAS No.:	452274-53-2
Molecular Formula:	C ₁₆₇ H ₂₅₆ N ₄₈ O ₅₀ S ₆
Molecular Weight:	3928.53
Target:	Antibiotic; Bacterial
Pathway:	Anti-infection
Solubility:	10 mM in DMSO

DHYNVSSGGQCLYSACPIFTKIQGTTCYRGKAKCKK
(Disulfide bridge:Cys5-Cys34; Cys12-Cys27; Cys17-Cys35)

BIOLOGICAL ACTIVITY:

Human β -defensin-1 (H β D-1) is a cysteine-rich cationic **skin-antimicrobial peptide (SAP)** produced by all epithelial surfaces, but also by circulatory cells and cells of the reproductive tract. Human β -defensin-1 has antimicrobial activities against a broad-spectrum bacteria^[1]. IC50 & Target: IC50: skin-antimicrobial peptide (SAP)^[1]

References:

[1]. Judith Raschig, et al. Ubiquitously Expressed Human Beta Defensin 1 (hBD1) Forms Bacteria-Entrapping Nets in a Redox Dependent Mode of Action. PLoS Pathog. 2017 Mar 21;13(3):e1006261.

[2]. E V Valore, et al. Human beta-defensin-1: An Antimicrobial Peptide of Urogenital Tissues. J Clin Invest. 1998 Apr 15;101(8):1633-42.

CAIndexNames:

L-Lysine, L- α -aspartyl-L-histidyl-L-tyrosyl-L-asparaginyl-L-cysteinyl-L-valyl-L-seryl-L-serylglycylglycyl-L-glutamyl-L-cysteinyl-L-leucyl-L-tyrosyl-L-seryl-L-alanyl-L-cysteinyl-L-prolyl-L-isoleucyl-L-phenylalanyl-L-threonyl-L-lysyl-L-isoleucyl-L-glutamylglycyl-L-threonyl-L-cysteinyl-L-tyrosyl-L-arginylglycyl-L-lysyl-L-alanyl-L-lysyl-L-cysteinyl-L-cysteinyl-, cyclic (5 \rightarrow 34),(12 \rightarrow 27),(17 \rightarrow 35)-tris(disulfide)

SMILES:

[DHYNVSSGGQCLYSACPIFTKIQGTTCYRGKAKCKK (Disulfide bridge:Cys5-Cys34; Cys12-Cys27; Cys17-Cys35)]

Caution: Product has not been fully validated for medical applications. For research use only.

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