BD-1 Protein, Human

MedChemExpress

Cat. No.:	HY-P7133
Synonyms:	rHuBD-1; HBD1; DEFB1
Species:	Human
Source:	E. coli
Accession:	P60022 (G22-K68)
Gene ID:	1672
Molecular Weight:	Approximately 5.1 kDa

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AA Sequence	GNFLTGLGHR SDHYNCVSSG GQCLYSACPI FTKIQGTCYR GKAKCCK
Biological Activity	Full biological activity determined by a chemotaxis bioassay using CD34+ dendritic cells is in a concentration range of 100- 1000 ng/mL.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against 20 mM PBS, pH 7.4, 130 mM NaCl.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION	
Background	Recombinant Human Beta Defensin-1 is an antimicrobial peptide that defends epithelial surfaces including the skin, gastrointestinal, and respiratory tracts ^[1] . Human Beta Defensin-1 may provide a fast-acting antimicrobial coating of tubular lumens in the upper urinary tract to prevent infection by inhibiting bacterial attachment to the urothelium and serving as a second-line chemical shield ^[2] .

REFERENCES

Product Data Sheet

[1]. Valore EV, et al. Human beta-defensin-1: an antimicrobial peptide of urogenital tissues. J Clin Invest. 1998 Apr 15;101(8):1633-42.

[2]. Becknell B, et al. Expression and antimicrobial function of beta-defensin 1 in the lower urinary tract. PLoS One. 2013 Oct 21;8(10):e77714.

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

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