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DEFB1
Recombinant Human BD-1 (36 aa)

Catalog No.	CRB501B	**Quantity:**	20 µg
Alternate Names:	Beta-defensin 1		
Description:	Defensins (alpha and beta) are cationic peptides with a broad spectrum of antimicrobial activity that comprise an important arm of the innate immune system. The alpha-defensins are distinguished from the beta-defensins by the pairing of their three disulfide bonds. To date, four human beta-defensins have been identified; BD-1, BD-2, BD-3 and BD-4. Beta-defensins are expressed on some leukocytes and at epithelial surfaces. In addition to their direct antimicrobial activities, they are chemoattractant towards immature dendritic cells and memory T cells. The beta-defensin proteins are expressed as the C-terminal portion of precursors and are released by proteolytic cleavage of a signal sequence and, in the case of BD-1 (36 a.a.), a propeptide region. Beta-defensins contain a six-cysteine motif that forms three intra-molecular disulfide bonds.		
UniProt ID:	P60022		
Gene ID:	1672		
Source:	*E. coli*		
Molecular Weight:	3.9 kDa (36 aa)		
Formulation:	Lyophilized from a sterile-filtered solution without additives.		
Purity:	95% as determined by SDS-PAGE and HPLC analyses		
Endotoxin Level:	< 1 EU/µg		
Biological Activity:	Determined by its ability to chemoattract CD34+ dendritic cells using a concentration range of 100-1,000 ng/ml.		
Species Reactivity:	Bacteria, Human		
Amino Acid Sequence:	DHYNCVSSGG QCLYSACPIF TKIQGTCYRG KAKCCK		
Reconstitution:	**Centrifuge vial prior to opening.** Add sterile water to the vial to a concentration of 0.1 - 1.0 mg/mL. **Do not vortex.** After complete solubilization of the protein, it can be further diluted to other aqueous solutions containing a carrier protein such as 0.1 % BSA.		
Storage & Stability:	The lyophilized protein is stable at -20°C to -80° for up to 1 year. Reconstituted working aliquots are stable for 1 week at 2-8°C and for 3 months at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**		

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