

Defb3

Recombinant Mouse Defensin beta 3

Catalog No.	CS275A CS275B CS275C	Quantity:	5 µg 20 µg 1 mg
Alternate Names:	BD-3		
Description:	Beta defensin-3, also known as BD-3 and DEFB-3, is a membrane active cationic peptide that functions in inflammation and innate immune responses and coded by Defb 3 gene on chromosome 8 in mouse. There are at least 30 β-defensins which are distinguished from α-defensins by the connectivity pattern of their three intramolecular disulfide bonds. BD3 is widely expressed among epithelial tissues, notably by keratinocytes and airway epithelial cells. It is upregulated in response to proinflammatory cytokines, microbial and viral infections, and at the edges of skin wounds. BD3 induction in osteoarthritis chondrocytes promotes MMP1 and 13 productions and inhibits TIMP1 and 2 expressions.		
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.		
Gene ID:	27358		
Source:	<i>E. coli</i>		
Molecular Weight:	Approximately 4.6 kDa, a single non-glycosylated polypeptide chain containing 41 amino acids.		
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 2 × PBS, pH 7.4.		
Purity:	>95% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	Less than 1 EU/µg of rMuBD-3 as determined by LAL method.		
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ determined by anti microbial activity against gram-positive <i>S.aureus</i> and gram-negative <i>P.aeruginosa</i> and <i>E. coli</i>		
Amino Acid Sequence:	KKINNPVSCL RKGGRWCNRC IGNTREQIGSC GVPFLKCKR K		
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.		
Storage & Stability:	This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2-4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. Avoid repeated freeze/thaw cycles.		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



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