

Defb4

Recombinant Rat beta-Defensin 4

Catalog No.	CS508A CS508B CS508C	Quantity:	5 µg 20 µg 1 mg
Alternate Names:	BD-4, Defensin beta 4		
Description:	<p>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 rat beta-defensins have been identified; BD-1, BD-2, BD-3 and BD-4. The beta-defensin proteins are expressed at the C-terminal region of precursors and are released by proteolytic cleavage of a signal sequence. Beta-defensins contain a six-cysteine motif that forms three intra-molecular disulfide bonds. Beta-defensins are 3-5 kDa peptides ranging in size from 33-47 amino acid residues. BD-4 is expressed in testis, stomach, uterus, neutrophils, thyroid, lung and kidney.</p> <p>Recombinant Rat BD-4 is single non-glycosylated polypeptide chain containing 41 amino acids.</p>		
Gene ID:	64389		
Source:	<i>E. coli</i>		
Molecular Weight:	4.4 kDa		
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 10 mM PB, pH 7.4, + 500 mM NaCl.		
Purity:	>95% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	<1 EU/µg as determined by LAL method.		
Biological Activity:	Fully biologically active when compared to standard. The biological activity as determined by a chemotaxis bioassay using human monocytes is in a concentration range of 0.1-100.0 ng/ml.		
Amino Acid Sequence:	QSINNPITCL TKGGVCWGPC TGGFRQIGTC GLPRVRCCKK K		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. 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.		

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