Recombinant Murine Beta-defensin 3

Catalog No: #AP60215

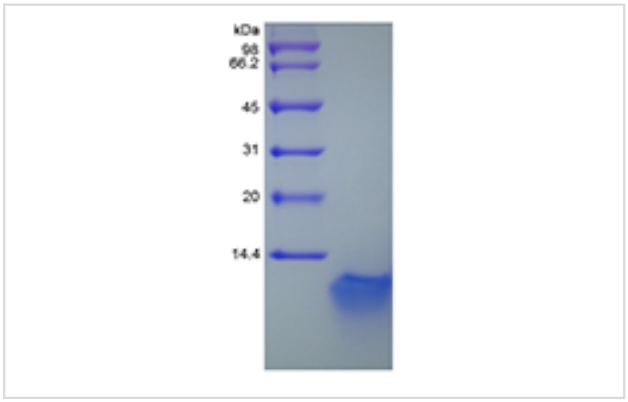
Package Size: #AP60215-1 5ug #AP60215-2 100ug #AP60215-3 500ug

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Recombinant Murine Beta-defensin 3
Host Species	Escherichia coli.
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Other Names	Defensin beta3
Uniprot	Q9WTL0
GeneID	27358
Calculated MW	Approximately 4.6 kDa, a single non-glycosylated polypeptide chain containing 41 amino acid residues.
Target Sequence	KKINNPVSCL RKGGRCWNRC IGNTRQIGSC GVPFLKCCKR K
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 2 x PBS, pH 7.4.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.- 12 months from date of receipt, -20 to -70 °C as supplied.- 1 month, 2 to 8 °C under sterile conditions after reconstitution.- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Images



Background

Defensins (alpha and beta) are cationic peptides with antimicrobial activity against Gram-negative and Gram-positive bacteria, fungi, and enveloped viruses. They are 2-6 kDa proteins and take important roles in innate immune system. On the basis of their size and pattern of disulfide bonding, mammalian defensins are classified into alpha, beta and theta categories. β-Defensins are expressed on some leukocytes and at epithelial surfaces. They contain a six-cysteine motif that forms three intra-molecular disulfide bonds. Because β-defensins are cationic peptides, they can therefore interact with the membrane of invading microbes, which are negative due to lipopolysaccharides (LPS) and lipoteichoic acid (LTA) found in the cell membrane. Especially, they have higher affinity to the binding site compared to Ca2+ and Mg2+ ions. Furthermore, they can affect the stability of the membrane. Additionally, they are not only have the ability to strengthen the innate immune system but can also enhance the adaptive immune system by chemotaxis of monocytes, T-lymphocytes, dendritic cells and mast cells to the infection site.

Note: This product is for in vitro research use only