

## 32-6306: BD14 Mouse

**Alternative Name :** Beta-defensin 14, BD-14, mBD-14, Defensin, beta 14, Defb14.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

Alpha and Beta Defensins are cationic peptides with antimicrobial activity against Gram-negative and Gram-positive bacteria, fungi and enveloped viruses. These 2-6kDa proteins have vital roles in innate immune system. Mammalian Defensins are classified into alpha, beta and theta categories, based on their size and pattern of disulfide bonding. Beta-Defensins contain a six-cysteine motif which forms 3 intra-molecular disulfide bonds. Since beta-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. In addition, they can affect the stability of the membrane.

Beta Defensin-14 Mouse Recombinant produced in E.coli is a single, non-glycosylated, polypeptide chain containing 45 amino acids and having a molecular mass of 5.2kDa. The BD14 is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 5 µg / 20 µg

**Purification :** Greater than 96.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

**Content :** BD-14 protein was lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4. It is recommended to reconstitute the lyophilized BD14 in sterile 18M-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized Mouse BD14 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BD-14 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Amino Acid :** FLPKTLRKFF CRIRGGRCV LNCLGKEEQI GRCSNSGRKC CRKKK.