

## 32-1062: mBD 1 Recombinant Protein

**Alternative Name :** Beta-defensin 1, BD-1, Defensin beta 1, hBD-1, HBD1, HBP1, DEFB1, HBD-1, HBP-1, DEFB101, DEFB-1, MGC51822.

### Description

Source : Escherichia Coli. BD 1 Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 37 amino acids and having a molecular mass of 4.1 KDa. The BD 1 Mouse is purified by proprietary chromatographic techniques. The Defensin family are highly similar in their protein sequence and are microbicidal & cytotoxic peptides made by neutrophils. Beta Defensin-1 is an antimicrobial peptide having the resistance of epithelial surfaces to microbial colonization. Beta Defensin-1 has close proximity to Defensin Alpha-1 and has been implicated in the pathogenesis of cystic fibrosis. Skin of patients having atopic dermatitis patients and mycosis fungoides (non-lesional and lesional) show lower human Beta Defensin-1 mRNA expression and higher human Beta Defensin-2 and human Beta Defensin-3 mRNA expression. Beta Defensin is highly expressed by epithelial cells. Beta-defensin 1 may play a role in the pathogenesis of severe sepsis.

### Product Info

**Amount :** 20 µg  
**Purification :** Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.  
**Content :** Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH7.4.  
**Storage condition :** Lyophilized Mouse BD 1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BD 1 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 :** DQYKCLQHGG FCLRSSCPN TKLQGTCKPD KPNCKKS.

### Application Note

It is recommended to reconstitute the lyophilized Mouse BD-1 in sterile 18M-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. Measured by its ability to chemoattract CD34+ dendritic cells using a concentration range of 0.1-1.0 ug/ml, corresponding to a specific activity of 1,000-10,000 units/mg.

