

## 32-1063: rBD 1 Recombinant Protein

**Alternative Name :** Beta-defensin 1, BD-1, rBD-1, Defensin beta 1, Defb1.

### Description

Source : Escherichia Coli. BD-1 Rat Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 37 amino acids and having a molecular mass of 4.1kDa. The BD-1 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

<b>Amount :</b>	20 µg
<b>Purification :</b>	Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	BD-1 protein was lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
<b>Storage condition :</b>	Lyophilized 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.
<b>Amino Acid :</b>	DQYRCLQNGG FCLRSSCP SH TKLQGTCKPD KPNCCRS.

### Application Note

It is recommended to reconstitute the lyophilized BD-1 in sterile 18M-cm H<sub>2</sub>O not less than 100µg/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 µg/ml.

