

**BD-1, human recombinant protein****β-defensin 1, BD-1, Defensin β 1, hBD-1, HBD1, HBP1, DEFB1, HBD-1, HBP-1, DEFB101, DEFB-1, MGC51822****Catalog # PBV10289r****Specification**

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**BD-1, human recombinant protein - Product info**

Primary Accession

[P60022](#)

Calculated MW

**5.0 kDa** KDa**BD-1, human recombinant protein - Additional Info**

Gene ID

**1672**

Gene Symbol

**DEFB1****Other Names**

β-defensin 1, BD-1, Defensin β 1, hBD-1, HBD1, HBP1, DEFB1, HBD-1, HBP-1, DEFB101, DEFB-1, MGC51822

Gene Source

**Human**

Source

**E. coli**

Assay&amp;Purity

**SDS-PAGE; ≥98%**

Assay2&amp;Purity2

**HPLC;**

Recombinant

**Yes**

Results

**0.1-1 µg/ml****Target/Specificity**

BD-1

**Application Notes**Reconstitute in dH<sub>2</sub>O to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.**Format**

Lyophilized protein

**Storage**

-20°C; Lyophilized from a concentrated (1 mg/ml) solution containing 20 mM PBS pH-7.4 and 130 mM sodium chloride

**BD-1, human recombinant protein - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

**BD-1, human recombinant protein - Images****BD-1, human recombinant protein - Background**

The Defensin family are highly similar in their protein sequence and are microbicidal & cytotoxic peptides made by neutrophils.  $\beta$  Defensin-1 (BD-1) is an antimicrobial peptide having the resistance of epithelial surfaces to microbial colonization. BD-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 BD-1 mRNA expression and higher human BD-2 and human BD-3 mRNA expression.  $\beta$  Defensin is highly expressed by epithelial cells. BD-1 may play a role in the pathogenesis of severe sepsis. Variation in human BD-1 contributes to asthma diagnosis, with apparent gender-specific effects. Human BD-3 is a dimer, while Human BD-1 and Human BD-2 are monomeric. Recombinant human  $\beta$  Defensin-1 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 47 amino acids and having a molecular mass of 5 kDa.

**BD-1, human recombinant protein - References**

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