

BD-2
Catalog # PVGS1178**Specification**

BD-2 - Product Information

Primary Accession [P82020](#)
Species
Mouse

Sequence
Ala21-Lys71

Purity
> 98% as analyzed by SDS-PAGE
> 98% as analyzed by HPLC

Endotoxin Level
< 1 EU/ µg of protein by LAL method

Biological Activity
Fully biologically active when compared to standard. The biologically active determined by a chemotaxis bioassay using immature human dendritic cells is in a concentration of 10-100 ng/ml.

Expression System
E. coli

Theoretical Molecular Weight
5.5 kDa

Formulation **Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.**

Reconstitution
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

BD-2 - Additional Information

Gene ID 13215

Other Names
Beta-defensin 2, BD-2, mBD-2, Defensin, beta 2, Defb2

Target Background
Defensins (alpha and beta) are cationic peptides with a broad spectrum of antimicrobial activity

that comprise an important arm of the innate immune system. The α -defensins are distinguished from the β -defensins by the pairing of their three disulfide bonds. To date, four β -defensins have been identified; BD-1, BD-2, BD-3 and BD-4. β -defensins are expressed on some leukocytes and at epithelial surfaces. In addition to their direct antimicrobial activities, they are chemoattractant towards immature dendritic cells and memory T cells. The β -defensin proteins are expressed as the C-terminal portion of precursors and are released by proteolytic cleavage of a signal sequence and, in the case of BD-1 (36 a.a.), a propeptide region. β -defensins contain a six-cysteine motif that forms three intra-molecular disulfide bonds.

BD-2 - Protein Information

Name Defb2

Function

Has bactericidal activity.

Cellular Location

Secreted.

Tissue Location

Kidney, uterus and to a lesser extent in heart.

BD-2 - 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-2 - Images