

BD-3

Catalog # PVGS1144

Product Information

Primary Accession Q32ZI4
Species Rat

Sequence Lys23-Lys63

Purity > 95% as analyzed by SDS-PAGE

> 95% as analyzed by HPLC

Endotoxin Level

Biological Activity Fully biologically active when compared to standard. Measured by its

antimicrobial activity against E. coli. The ED₅₀ for this effect is typically

4.0-20.0 □g/ml.

Expression System E. coli

Theoretical Molecular Weight 4.5 kDa

Formulation Lyophilized from a 0.2 \(\text{Im filtered solution in PBS, pH 7.4.} \)

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.

Additional Information

Gene ID 641623

Other Names Beta-defensin 3, BD-3, Defensin, beta 3, Defb3

Target BackgroundBeta defensin-3, also known as BD-3 and DEFB-3, is a membrane active

cationic peptide that functions in inflammation and innate immune responses and coded by Defb 3 gene on chromosome 8 in mouse. There are at least 30 β -defensins which are distinguished from α -defensins by the connectivity pattern of their three intramolecular disulfide bonds. BD3 is widely expressed among epithelial tissues, notably by keratinocytes and airway epithelial cells. It is upregulated in response to proinflammatory cytokines, microbial and

viral infections, and at the edges of skin wounds. BD3 induction in

osteoarthritis chondrocytes promotes MMP1 and 13 productions and inhibits

TIMP1 and 2 expressions.

Protein Information

Name Defb3

Function Has bactericidal activity.

Cellular Location Secreted.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.