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Datasheet for ABIN2017680

**Defensin beta 3 Protein (DEFB3)**

## Overview

Quantity:	1 mg
Target:	Defensin beta 3 (DEFB3)
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

## Product Details

Sequence:	KKVYNAVSCM TGGICWLKC SGTFREIGSC GTRQLKCKK K
Characteristics:	Fully biologically active when compared to standard. Measured by its antimicrobial activity against E. coli. The ED50 for this effect is typically 4-20 µg/mL.
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Sterility:	0.2 µm filtered
Endotoxin Level:	< 1 EU/µg of rRtBD-3 as determined by LAL method.

## Target Details

Target:	Defensin beta 3 (DEFB3)
Alternative Name:	beta-Defensin 3 (BD-3) ( <a href="#">DEFB3 Products</a> )
Background:	Beta 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 b-defensins which are distinguished from beta-

## Target Details

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.

Synonyms: Beta-defensin 3, BD-3, Defensin beta 3, Defb3

Molecular Weight: 4.5 kDa, a single non-glycosylated polypeptide chain containing 41 amino acids.

Pathways: [Production of Molecular Mediator of Immune Response](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at  $\leq -20^{\circ}\text{C}$ . Further dilutions should be made in appropriate buffered solutions.

Buffer: Lyophilized from a 0.2  $\mu\text{m}$  filtered concentrated solution in PBS, pH 7.4.

Handling Advice: Avoid repeated freeze/thaw cycles.

Storage:  $4^{\circ}\text{C}/-20^{\circ}\text{C}$

Storage Comment: This lyophilized preparation is stable at  $2-8^{\circ}\text{C}$ , but should be kept at  $-20^{\circ}\text{C}$  for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at  $2-8^{\circ}\text{C}$ . For maximal stability, apportion the reconstituted preparation into working aliquots and store at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ .