



[Go to Product page](#)

Datasheet for ABIN2017683  
**Defensin beta 4 Protein (DEFB4)**

### Overview

Quantity:	1 mg
Target:	Defensin beta 4 (DEFB4)
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

### Product Details

Sequence:	QSINNPITCL TKGGVCWGPC TGGFRQIGTC GLPRVRCCKK K
Characteristics:	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human monocytes is in a concentration range of 0.1-100.0 ng/mL.
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Sterility:	0.2 µm filtered
Endotoxin Level:	< 1 EU/µg of rRtBD-4 as determined by LAL method.

### Target Details

Target:	Defensin beta 4 (DEFB4)
Alternative Name:	beta-Defensin 4 (BD-4) ( <a href="#">DEFB4 Products</a> )
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 a-defensins are distinguished from the b-defensins by the pairing of their three disulfide bonds. To date, four rat

## Target Details

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b-defensins have been identified, BD-1, BD-2, BD-3 and BD-4. The b-defensin proteins are expressed as the C-terminal portion of precursors and are released by proteolytic cleavage of a signal sequence. b-defensins contain a six-cysteine motif that forms three intra-molecular disulfide bonds. Beta-defensins are 3-5 kDa peptides ranging in size from 33-47 amino acid residues. BD-4 is expressed in testis, stomach, uterus, neutrophils, thyroid, lung and kidney. Synonyms: Beta-defensin 4, BD-4, BD-2, Defensin beta 4, RBD-2, RBD-4, Defb4, Defb2, Defb3.

Molecular Weight: 4.4 kDa, a single non-glycosylated polypeptide chain containing 41 amino acids.

## Application Details

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Restrictions: For Research Use only

## Handling

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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  $\leq -20$  °C. Further dilutions should be made in appropriate buffered solutions.

Buffer: Lyophilized from a 0.2  $\mu$ m filtered concentrated solution in 10 mM PB, pH 7.4, 500 mM NaCl.

Handling Advice: Avoid repeated freeze/thaw cycles.

Storage: 4 °C/-20 °C

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