

## Datasheet for ABIN987775

# Defensin beta 4 Protein (DEFB4) (AA 33-47)



## Overview

Quantity:	20 μg
Target:	Defensin beta 4 (DEFB4)
Protein Characteristics:	AA 33-47
Origin:	Human
Source:	Escherichia coli (E. coli)
Biological Activity:	Active

### **Product Details**

Sequence:	EFELDRICGY GTARCRKKCR SQEYRIGRCP NTYACCLRKW DESLLNRTK
Characteristics:	Fully biologically active when compared to standard. The ED50 determined by a chemotaxis bioassay using human monocytes is less than 100 ng/ml, corresponding to a specific activity of $>$ , $1.0 \times 104$ IU/mg.
Purity:	> 98 % by SDS-PAGE and HPLC analyses.
Endotoxin Level:	Level Less than 1EU/μg of rHuBD-4 as determined by LAL method

# Target Details

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

#### **Target Details**

human beta-defensins have been identified, BD-1, BD-2, BD-3 and BD-4. The beta-defensin proteins are expressed as the C-terminal portion of precursors and are released by proteolytic cleavage of a signal sequence. beta-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. In addition to its direct antimicrobial activities, BD-4 is chemoattractant towards human blood monocytes. Synonym: beta-Defensin 4 (BD-4), Human. Formulation: Lyophilized from a 0.2µm filtered concentrated solution in 20mM PB, pH 7.4, 130mM NaCl.

Molecular Weight:

Approximately 6.0 KDa, a single non-glycosylated polypeptide chain containing 50 amino acids.

## **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
Storage:	4 °C