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# Recombinant Human beta Defensin 3/DEFB103A Protein

Catalog No.: RP02867 Recombinant

## **Sequence Information**

**Species Gene ID Swiss Prot** Human 55894 P81534

## Tags

N-His

## **Synonyms**

Beta-defensin 3; BD-3; DEFB-3; HBD3; hBD-3; DEFB103A

## **Product Information**

#### Source

**Purification** 

<I>E. coli</I>

>95% as determined by SDS-PAGE

#### **Endotoxin**

Please contact us for more information.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of 50mM Tris, 0.3% Ttiton X-100, 0.3% SKL, pH 8.5.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### **Contact**



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# **Background**

Beta-defensin 3 is a member of the defensin family. Defensin family is comprised by microbicidal and cytotoxic peptides made by neutrophils. Members of the beta-defensin 3 family are highly similar in protein sequence. Beta-defensin 3 shows antimicrobial activity against Gram-positive bacteria S.aureus and S.pyogenes, Gramnegative bacteria P.aeruginosa and E.coli and the yeast C.albicans. Beta-defensin 3 is abundantly expressed in skin and tonsils, and to a lesser extent in trachea, uterus, kidney, thymus, adenoid, pharynx and tongue. It is also expressed in salivary gland, bone marrow, colon, stomach, polyp and larynx. However, in small intestine, it cannot be detected. Defensin has broad spectrum antimicrobial activity and may play an important role in innate epithelial defense. Beta-defensin 3 kills multiresistant S.aureus and vancomycin-resistent E.faecium. It has no significant hemolytic activity.

## **Basic Information**

## **Description**

Recombinant Human beta Defensin 3/DEFB103A Protein is produced by <I>E. coli</I>expression system. The target protein is expressed with sequence (Gly23-Lys67) of human beta Defensin 3/DEFB103A (Accession  $\#NP_061131.1$ ) fused with a 6×His tag at the N-terminus.

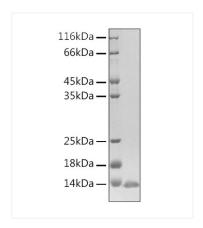
#### **Bio-Activity**

#### Storage

Store the lyophilized protein at -20°C to -80°C for 12 months. <br/> After reconstitution, the protein solution is stable at -20°C to -80°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

# **Validation Data**



Recombinant Human beta Defensin 3/DEFB103A Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 13 kDa.