



Recombinant Protein Technical Manual

Recombinant Human Defensin/Beta-defensin 3/DEFB103 Protein (His Tag) RPES2705

Product Data:

Product SKU: RPES2705

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: P81534

Protein Information:

Molecular Mass: 7.3 kDa

AP Molecular Mass: 12 kDa

Tag: N-His

Bio-activity:

Purity: > 99 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 0.3% Triton X00, 0.3% SKL, pH 8.5

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: BD-3;DEFB-3;DEFB103;DEFB3;hBD-3;HBD3;HBP-3;HBP3

Immunogen Information:

Sequence: Gly 23-Lys 67

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*, Gram-negative 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-resistant *E. faecium*. It has no significant hemolytic activity.