TECHNICAL DATA SHEET

Recombinant Human BD-3 (Carrier-Free)

Catalog Number: 21-9164

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Human BD-3 (Carrier-Free)

DESCRIPTION

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 alpha-defensins are distinguished from the beta-defensins by the pairing of their three disulfide bonds. To date, six human beta-defensins have been identified; BD-1, BD-2, BD-3, BD-4, BD-5 and BD-6. beta-defensins are expressed on some leukocytes and at epithelial surfaces.

MOLECULAR MASS

Recombinant Human BD-3 is a 5.1 kDa protein containing 45 amino acid residues.

AMINO ACID SEQUENCE

GIINTLQKYY CRVRGGRCAV LSCLPKEEQI GKCSTRGRKC CRRKK

SOURCE	APPLICATIONS	PURITY	STORAGE
E. coli	Bioassay	98 %	-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Bacteria, Human, Mouse, Virus

BIOACTIVITY

Exhibits antimicrobial activity against gram-positive bacteria S. aureus and gram-negative P. aeruginosa and E.coli.

RESEARCH AREAS

Immune System, Chemotaxis

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Bryan, J.D. Streptococcus agalactiae CspA is a serine protease that inactivates chemokines. 2009. Journal of Bacteriology; 191(6):1847-54. Schibli, D.J. The solution structures of the human beta-defensins lead to a better understanding of the potent bactericidal activity of HBD3 against Staphylococcus aureus. 2002. The Journal of Biological Chemistry; 277(10):8279-8289.