

TECHNICAL DATA SHEET

Recombinant Human BD-3 (Carrier-Free)

Catalog Number: 21-9164

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

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 CRVRGGRCVAV LSCLPKKEEQI GKCSTRGRKC CRRKK

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-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.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

For Research Use Only.

Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.