

TECHNICAL DATA SHEET

## Recombinant Human BD-2 (Carrier-Free)

Catalog Number: 21-9156

**RPx-Pro™ Recombinant Protein**  
PRODUCT INFORMATION

**CONTENTS**

Recombinant Human BD-2 (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. In addition to their direct antimicrobial activities, they can act as chemoattractants towards immature dendritic cells and memory T cells.

**MOLECULAR MASS**

Recombinant Human BD-2 is a 4.3 kDa protein containing 41 amino acid residues.

**AMINO ACID SEQUENCE**

GIGDPVTLCK SGAICHPVFC PRRYKQIGTC GLPGTKCCKK P

**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, Rat, Virus

**BIOACTIVITY**

Determined by its ability to chemoattract immature human dendritic cells using a concentration of 10.0-100.0 ng/ml.

**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. Hoover, D.M. The Structure of Human b-Defensin-2 Shows Evidence of Higher Order Oligomerization. 2000. The Journal of Biological Chemistry; 275(42):32911-32918.

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