DEFA1
Recombinant Human NP-1

Catalog No.	CRN400B	**Quantity:**	20 µg

Alternate Names: Neutrophil defensin 1, Defensin alpha 1, HNP-1

Description: Defensins (α and β) are cationic peptides with a broad spectrum of antimicrobial activity that comprise an important arm of the innate immune system. The α-defensins which include NP-1, NP-2 and NP-3, are distinguished from the β-defensins by the pairing of their three disulfide bonds. In addition to antimicrobial activity, NP-1 exhibits chemotactic activity on dendritic cells. NP-1 is expressed as the C-terminal portion of an inactive precursor protein, which also contains a 19 amino acid N-terminal signal sequence and a 45 amino acid polypeptide. NP-1 contains a six-cysteine motif that forms three intra-molecular disulfide bonds.

UniProt ID: P59665

Gene ID: 1667

Source: *E. coli*

Molecular Weight: 3.4 kDa (30 aa)

Formulation: Lyophilized from PBS

Purity: > 98% by SDS-PAGE and HPLC analyses.

Endotoxin Level: < 1 EU/µg

Biological Activity: Determined by its ability to chemoattract immature dendritic cells using a concentration range of 1.0-10.0 ng/ml.

Amino Acid Sequence: ACYCRIPACI AGERRYGYCI YQGRLWAFCC

Reconstitution: **Centrifuge vial prior to opening**. Add PBS or medium to the vial to fully solubilize the protein to a concentration ≥ 100 µg/ml. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein such as 0.1% BSA and store in working aliquots at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

Storage & Stability: Lyophilized protein is stable for 1 year at -20°C to -80°C. Store reconstituted protein in working aliquots at -20°C to -80°C. **Avoid repeated freeze-thaw cycles**.

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