NP-1 Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Neutrophil Peptide-1, alpha Defensin-1, HNP-1, Cryptdin

Cat. No.:	
RBG10251005	(5 µg)
RBG10251020	(20 µg)
RBG10251100	(100 µg)

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, which include NP-1, NP-2 and NP-3, are distinguished from the beta-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. Recombinant Human NP-1 is a 3.4 kDa protein containing 30 amino acid residues.

Research topic

Chemokines, Cytokines and chemokines and related molecules, Immune Response, Infection and Inflammation

Amino Acid Sequence

ACYCRIPACI AGERRYGYCI YQGRLWAFCC

Source

E. coli

Purity

98%

Biological Activity

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

Endotoxin

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

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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