06/18

For research use only

## NP-1, Human Recombinant

**CATALOG NO:** P1333-5 5 μg P1333-20 20 μg

ALTERNATE NAMES: Neutrophil Peptide-1, alpha Defensin-1, HNP-1, Cryptdin, Vascular

endothelial cell growth factor 165 receptor, CD304, NRP,

VEGF165R, NRP1, neuronal pentraxin-1, NP1, NPTX1

SOURCE: E. coli

**PURITY:** ≥ 98% by SDS-PAGE analysis

MOL. WEIGHT: 3.4 kDa

ENDOTOXIN LEVEL: <0.1 EU/µg endotoxin, tested

FORM: Lyophilized

STORAGE CONDITIONS: Store at -20°C. Avoid repeated freezing and thawing cycles.

**BIOLOGICAL ACTIVITY:** Determined by its ability to chemoattract immature dendritic cells

using a concentration of 1.0-10.0 ng/ml

**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 1 week. 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.

**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.

## **RELATED PRODUCTS:**

- Human CellExp<sup>™</sup> VEGF-B, human recombinant (Cat. No. 7230)
- Human CellExp™ CD304 / NRP1 / Neurophilin-1, human recombinant (Cat. No. 7375)
- Neuropilin-1 Blocking Peptide (Cat. No. 3856BP)
- Neuropilin-1 Antibody (Cat. No. 3856)

FOR RESEARCH USE ONLY! Not to be used on humans.

