



Product Information

Neutrophil Activating Peptide 2 (NAP-2)

Human, Recombinant

Expressed in *E. coli*

Product Number **N-214**

Product Description

Neutrophil Activating Peptide 2 (NAP-2) is produced from a KNA sequence encoding the 70 amino acid residue variant of mature NAP-2.^{1,2} It is expressed in *Escherichia coli*. The recombinant protein has predicted molecular mass of approximately 7.6 kDa.

NAP-2, Connective Tissue Activating Protein III (CTAP-III) and β -thromboglobulin (β -TG), are proteolytically processed carboxyl-terminal fragments of platelet basic protein (PBP) which is found in the α -granules of human platelets. NAP-2 has been shown to bind CXCR-2. Although CTAP-III, β -TG and PBP represent amino-terminal extended variants of NAP-2 and possess the same CXC chemokine domains, these proteins do not exhibit NAP-2 activity.

Reagents

NAP-2 is supplied lyophilized from a sterile filtered solution in 30% acetonitrile and 0.1% TFA, containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

Preparation Instructions

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 50 μ g/ml.

Storage/Stability

Store tightly sealed at -20°C . After reconstitution and for continuous use, store at $2 - 8^{\circ}\text{C}$ for up to one month. For extended storage, solution may be frozen in working aliquots. Storage in "frost-free" freezers is not recommended. Repeated freezing and thawing is not recommended.

Product Profile

The biological activity is measured by its induction of myeloperoxidase release from cytochalasin B treated human neutrophils³ or chemotaxis of BaF/3 hCXCR-2 transfected cells.

The ED₅₀ is typically 0.1 - 0.3 μ g/ml (cytochalasin B treated human neutrophils) and 0.1-0.5 ng/ml (BaF/3 hCXCR-2 transfected cells).

References

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3. Schröder, J.-M., et al., Purification and partial biochemical characterization of a human monocyte-derived, neutrophil-activating peptide that lacks interleukin 1 activity. *J. Immunol.*, **139**, 3474-3483 (1987).
4. Malkowski, M., et al. "The amino-terminal residues in the crystal structure of connective tissue activating peptide-III (des10) block the ELR chemotactic sequence." *J. Mol. Biol.* **266**, 367-380 (1997).
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