

DESCRIPTION

Source *E. coli*-derived human CXCL7/NAP-2 protein
Ala59-Asp128
Accession # P02775

N-terminal Sequence Analysis Ala59

Predicted Molecular Mass 7.6 kDa

SPECIFICATIONS

Activity Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR2.
The ED₅₀ for this effect is 0.200-1.60 ng/mL.

Endotoxin Level <0.10 EU per 1 µg of the protein by the LAL method.

Purity >97%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 50 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Neutrophil Activating Peptide 2 (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 alpha-granules of human platelets. NAP-2 is a member of the CXC chemokines. Similar to other ELR domain containing CXC chemokines such as IL-8 and the GRO proteins, NAP-2 has been shown to bind CXCR2 and to chemoattract and activate neutrophils. 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. It has been shown that the additional amino-terminal residues of CTAP-III masks the critical ELR receptor binding domain that is exposed on NAP-2 and may account for lack of NAP-2 activity.

References:

1. Schall, T. (1994) *The Cytokine Handbook*, 2nd edition, A. Thomson, ed. Academic Press, New York, p. 419.
2. Malkowski, M.G. *et al.* (1997) *J. Mol. Biol.* **266**:367.