

## NAP-2/CXCL7

Catalog # PVGS1415

## **Product Information**

Primary Accession P02775
Species Human

Sequence Ala59-Asp128

**Purity** > 98% as analyzed by SDS-PAGE

**Endotoxin Level** 

**Biological Activity** The EC<sub>50</sub> value of human NAP-2/CXCL7 on Ca<sup>2+</sup> mobilization assay in

CHO-K1/Ga15/hCXCR1 cells (human Ga15 and human CXCR1 stably expressed

in CHO-K1 cells) is less than 0.1 ☐g/ml.

Expression System CHO

**Formulation** Lyophilized after extensive dialysis against PBS.

**Reconstitution** It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in

ddH<sub>2</sub>O or PBS up to 100 □g/ml.

**Storage & Stability** Upon receiving, this product remains stable for up to 6 months at lower than

-70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw

cycles.

## **Additional Information**

**Gene ID** 5473

Other Names Platelet basic protein, PBP, C-X-C motif chemokine 7, Leukocyte-derived

growth factor, LDGF, Macrophage-derived growth factor, MDGF,

Small-inducible cytokine B7, Connective tissue-activating peptide III, CTAP-III,

LA-PF4, Low-affinity platelet factor IV, TC-2, Connective tissue-activating peptide III(1-81), CTAP-III(1-81), Beta-thromboglobulin, Beta-TG,

peptide III(1-01), CIAI -III(1-01), Deta-till offibogloballii, Deta-ta,

Neutrophil-activating peptide 2(74), NAP-2(74), Neutrophil-activating peptide

2(73), NAP-2(73), Neutrophil-activating peptide 2, NAP-2, TC-1,

Neutrophil-activating peptide 2(1-66), NAP-2(1-66), Neutrophil-activating peptide 2(1-63), NAP-2(1-63), PPBP, CTAP3, CXCL7, SCYB7, TGB1, THBGB1

Target Background Neutrophil Activating Peptide 2 (NAP-2) is 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 CXCR-2 and to chemoattract and activate neutrophils. Although CTAP-III,  $\beta$ -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. Recently, 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.

## **Protein Information**

Name PPBP

**Synonyms** CTAP3, CXCL7, SCYB7, TGB1, THBGB1

**Function** LA-PF4 stimulates DNA synthesis, mitosis, glycolysis, intracellular cAMP

accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and sulfated glycosaminoglycan. It also stimulates the formation and secretion of plasminogen activator by human synovial cells. NAP-2 is a ligand for CXCR1 and CXCR2, and NAP-2, NAP-2(73), NAP-2(74), NAP-2(1-66), and most potent NAP-2(1-63) are chemoattractants and activators for neutrophils. TC-1 and TC-2 are antibacterial proteins, in vitro released from activated

platelet alpha-granules. CTAP-III(1-81) is more potent than CTAP-III

desensitize chemokine-induced neutrophil activation.

**Cellular Location** Secreted.

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