10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NAP-2/CXCL7

Catalog # PVGS1130

Product Information

Primary Accession	P02775
Species	Human
Sequence	Ala59-Asp128
Purity	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
Endotoxin Level	
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human peripheral blood neutrophils is in a concentration range of 1.0-10.0 ng/ml.
Expression System	E. coli
Theoretical Molecular Weight	7.6 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in 20 mM PB, pH 7.4, 50 mM NaCl.
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 sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. 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, 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, 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. 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.