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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_{50} value of human NAP-2/CXCL7 on Ca^{2+} 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_2O 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, 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.