

Recombinant Human chemokine (C-X-C Motif) Ligand 7

Cat. No. PPBP-04H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human NAP-2/CXCL7 produced in <i>E. coli</i> is a single, non-glycosylated polypeptide chain containing 70 amino acids and having a molecular mass of 7.6 kDa.
Species	Human
Source	<i>E. coli</i>
Description	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.
Purity	>97% by SDS-PAGE and HPLC analyses.
Formulation	Lyophilized from a 0.2mm filtered concentrated (1.0mg/ml) solution in 20mM PB, pH 7.4, 50mM NaCl.
Specific Activity	Fully biologically active when compared to standard. Determined by its ability to

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	chemoattract human neutrophils using a concentration range of 1.0-10.0 ng/ml.
Endotoxin	Less than 1EU/mg of rHuNAP-2/CXCL7 as determined by LAL method.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.
Storage	This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
GENE INFORMATION	
Gene Name	PPBP
Synonyms	PBP; TC1; TC2; TGB; LDGF; MDGF; TGB1; B-TG1; CTAP3; CXCL7; NAP-2; SCYB7; THBGB; LA-PF4; THBGB1; Beta-TG; CTAPIII; NAP-2-L1; TGB1; SCYB7; CXCL7_HUMAN; Platelet basic protein [Precursor]; C-X-C motif chemokine 7; Small-inducible cytokine B7; Leukocyte-derived growth factor; LDGF; Macrophage-derived growth factor; MDGF; PPBP; pro-platelet basic protein (chemokine (C-X-C motif) ligand 7)
Gene ID	5473
mRNA Refseq	NM_002704

Protein Refseq	NP_002695
MIM	121010
UniProt ID	P02775
Chromosome Location	4q12-q13
Pathway	Cytokine-cytokine receptor interaction; Leukocyte transendothelial migration; Hemostasis.
Function	chemokine activity;glucose transmembrane transporter activity;growth factor activity.
PDB rendering based on 1f9p Available structures:1f9p,1nap,1tv 	