

Rev03  
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**DATASHEET**

# NAP-2/CXCL7, Human

Cat. No.: Z02821

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<b>CXCL7 (Ala59-Asp128) Accession # P02775</b>
<b>Purity</b>	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
<b>Endotoxin Level</b>	< 1 EU/ $\mu$ g of protein by LAL method
<b>Biological Activity</b>	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.
<b>Expression System</b>	E. coli
<b>Theoretical Molecular Weight</b>	7.6 kDa
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in 20 mM PB, pH 7.4, 50 mM NaCl.
<b>Reconstitution</b>	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.
<b>Storage &amp; Stability</b>	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.

## Background

**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.

**Synonyms :** PPBP; B-TG1; Beta-TG; CTAP-III; CTAP3; CTAPIII; CXCL-7; LA-PF4; LDGF; MDGF; NAP2; PBP; SCYB7; TC1; TC2; TGB; TGB1; THBGB; THBGB1; pro-platelet basic protein

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**