

Rev04
Update: Mar,01,2022

DATASHEET

NAP-2/CXCL7,Rat

Cat. No.: Z03302

Product Introduction

Species	Rat
Protein Construction	CXCL7 (Ile46-Ile107) Accession # Q99ME0
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	The EC ₅₀ value of Rat NAP-2/CXCL7 on Ca ²⁺ mobilization assay in CHO-K1/Gα15/rCXCR2 cells (human Gα15 and Rat CXCR2 stably expressed in CHO-K1 cells) is less than 200.0 ng/ml.
Expression System	E. coli
Apparent Molecular Weight	~6.9 kDa, on SDS-PAGE under reducing conditions.
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 ₂ O or PBS up to 100 μg/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.

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, 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.

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.