

NAP-2/CXCL7, Rat

Cat. No.: Z02956-1

Size: 1.0 mg

Synonyms: Platelet basic protein, PBP, Small inducible cytokine B7, Leukocyte-derived growth factor, LDGF, Macrophage-derived growth factor, MDGF, pro-platelet basic protein (chemokine (C-X-C motif) ligand 7), TC1, TC2, TGB, TGB1, B-TG1, CTAP3, NAP-2, SCYB7, THBGB, LA-PF4, THBGB1, Beta-TG, CTAPIII, CTAP-III.

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.

Amino Acid Sequence:

00001 IELRCRCTNT LSGIPLNSIS RVNVFRPGAH CDNVEIATL
00041 KNGKEVCLDP TAPMIKKIVK KI

Source: *E. coli*

Species: Rat

Biological Activity: Fully biologically active when compared to standard. The biologically active determined by a chemotaxis bioassay using human CXCR2 transfected murine BaF3 cells is in a concentration range of 0.1-1.0 ng/ml.

Molecular Weight: Approximately 6.8 kDa, a single non-glycosylated polypeptide chain containing 62 amino acids.

Formulation: Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/ μ g of rRtNAP-2/CXCL7 as determined by LAL method.

Storage: This lyophilized preparation is stable 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.