Overview

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, ^{2} -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.
Species	Rat
Source	*E. coli*
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.
Sequence	`IELRCRCTNT LSGIPLNSIS RVNVFRPGAH CDNVEVIATL KNGKEVCLDP TAPMIKKIVK KI`

Properties

Measured Molecular Weight	Approximately 6.8 kDa, a single non-glycosylated polypeptide chain containing 62 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
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 d -20 °C. Further dilutions should be made in appropriate buffered solutions.
Endotoxin Level	Less than 1 EU/µg of rRtNAP-2/CXCL7 as determined by LAL method.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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.**

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