

Active Recombinant Rat Ppbp Protein (62 aa)

Cat. No. Pbp-325P **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat NAP-2/CXCL7 produced in E. coli is a single non-glycosylated polypeptide chain containing 62 amino acids. A fully biologically active molecule, rrNAP-2/CXCL7 has a molecular mass of 6.9 kD analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.
Species	Rat
Source	E.coli
ProteinLength	62
Description	Rat NAP-2/CXCL7 is a small cytokine belonging to the CXC chemokine family. It is an isoform of Beta-Thromboglobulin or Pro-Platelet basic protein (PPBP). 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 recruit and active ateneutrophils through chemotaxis. 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. NAP-2 stimulates various processes including mitogenesis, synthesis of the extracellular matrix, glucose metabolism and synthesis of plasminogen activator. Recently, it has been shown that the additional amino-terminal residues of CTAP-III mask the critical ELR receptor binding domain that is exposed on NAP-2 and may account for lack of NAP-2 activity.
Form	Sterile Filtered White lyophilized (freeze-dried) powder.

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Bio-activity	The EC50 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 ng/mL.
Molecular Mass	6.9 kDa, observed by reducing SDS-PAGE.
AA Sequence	IELRCRCTNTLSGIPLNSISRVNVFRPGAHCNDNEVIATLKNGKEVCLDPTAPMIKKIVKKI
Endotoxin	< 0.2 EU/μg, determined by LAL method.
Purity	> 95% as analyzed by SDS-PAGE.
Storage	Lyophilized recombinant Rat NAP-2/CXCL7 remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, Rat NAP-2/CXCL7 should be stable up to 1 week at 4 centigrade or up to 3 months at -20 centigrade.
Storage Buffer	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH ₂ O or PBS at 100 μg/mL.

GENE INFORMATION

Gene Name	Ppbp pro-platelet basic protein [<i>Rattus norvegicus</i> (Norway rat)]
Official Symbol	Ppbp
Synonyms	Ppbp; pro-platelet basic protein; Cxcl7; Nap-2; platelet basic protein; chemokine (C-X-C motif) ligand 7; neutrophil activating peptide-2
Gene ID	246358

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mRNA Refseq	NM_153721
Protein Refseq	NP_714943
UniProt ID	Q99ME0

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