

Rat NAP-2 / PPBP / CXCL7 Protein (His Tag)



Sino Biological Inc.

Biological Solution Specialist

Catalog Number: 80066-R08Y

General Information

Gene Name Synonym:

B-TG1; Beta-TG; CTAP-III; CTAP3; CTAPIII; CXCL7; LA-PF4; LDGF; MDGF; NAP-2; PBP; SCYB7; TC1; TC2; TGB; TGB1; THBGB; THBGB1; 2400003M24Rik; A1854500; b-TG1; beta-TG; CTAP3; CTAPIII; Cxcl7; LA-PF4; LDGF; MDGF; NAP-2; NAP-2-L1; Scyb7; TGB; TGB1; THBGB1

Protein Construction:

A DNA sequence encoding the rat Cxcl7 (NP_714943.1) (Lys38-Tyr111) was expressed with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: Yeast

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Lys 38

Molecular Mass:

The recombinant rat Cxcl7 consists of 84 amino acids and predicts a molecular mass of 9.6 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

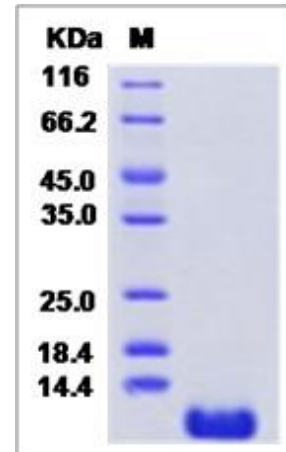
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Pro-platelet basic protein (PPBP) is also known as Chemokine (C-X-C motif) ligand 7 (CXCL7) and nucleosome assembly protein (Nap-2). Nap-2 / PPBP / CXCL7 is released in large amounts from platelets following their activation and is a platelet-derived growth factor that belongs to the CXC chemokine family. This growth factor is a potent chemoattractant and activator of neutrophils. Nap-2 / PPBP / CXCL7 has been shown to stimulate various cellular processes including DNA synthesis, mitosis, glycolysis, intracellular cAMP accumulation, prostaglandin E2 secretion, and synthesis of hyaluronic acid and sulfated glycosaminoglycan. It also stimulates the formation and secretion of plasminogen activator by synovial cells. Nap-2 is a ligand for CXCR1 and CXCR2, and Nap-2, Nap-2 (73), Nap-2 (74), Nap-2 (1-66), and most potent Nap-2 (1-63) are chemoattractants and activators for neutrophils.

References

1. Walz A, *et al.* (1989) Effects of the neutrophil-activating peptide NAP-2, platelet basic protein, connective tissue-activating peptide III and platelet factor 4 on human neutrophils. *J Exp Med.* 170(5):1745-50.
2. Walz A, *et al.* (1990) Generation of the neutrophil-activating peptide NAP-2 from platelet basic protein or connective tissue-activating peptide III through monocyte proteases. *J Exp Med.* 171(2): 449-54.
3. Loetscher P, *et al.* (1994) Both interleukin-8 receptors independently mediate chemotaxis. Jurkat cells transfected with IL-8R1 or IL-8R2 migrate in response to IL-8, GRO alpha and NAP-2. *FEBS Lett.* 341(2-3): 187-92.

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