

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CXCL7/NAP-2 in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with recombinant human (rh) ENA-70, rhENA-74, rhENA-78, rhGCP-2, rhGRO α , rhGRO β , rhGRO γ , rhIL-8, rhIP-10, rhMIG, rhSDF-1 α , and rhSDF-1 β is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CXCL7/NAP-2 (R&D Systems, Catalog # 393-NP) Ala59-Asp128 Accession # P02775
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 μ g/mL	Recombinant Human CXCL7/NAP-2 (Catalog # 393-NP)
Human CXCL7/NAP-2 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Human CXCL7/NAP-2 Antibody (Catalog # MAB393)
ELISA Detection	0.1-0.4 μ g/mL	Human CXCL7/NAP-2 Biotinylated Antibody (Catalog # BAF393)
Standard		Recombinant Human CXCL7/NAP-2 (Catalog # 393-NP)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Neutrophil Activating Peptide 2 (NAP-2), Connective Tissue Activating Protein III (CTAP-III) and β -thromboglobulin (β -TG), are 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 CXCR2 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. 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.

References:

1. Schall, T. (1994) *The Cytokine Handbook*, 2nd edition, A. Thomson, ed. Academic Press, New York, p. 419.
2. Malkowski, M.G. *et al.* (1997) *J. Mol. Biol.* **266**:367.