**BACKGROUND**

Members of the α-chemokine subfamily of inducible, secreted, pro-inflammatory cytokines contain a similar motif, in which the first two cysteine residues are separated by a single residue (Cys-X-Cys), and are also chemoattractant for neutrophils. The platelet basic protein (PBP), a member of the α-chemokine family, resides in the α-granules of platelets and is released upon their activation. Proteolytic cleavage of the amino-terminus of PBP leads to the generation of several peptides, which include mature PBP, connective tissue-activating peptide III (CTAP-III, also designated low affinity platelet factor IV (LA-PF4)), β thromboglobulin (β TG) and neutrophil-activating peptide-2 (NAP-2). PBP and its N-truncated derivatives mediate inflammation and wound healing. Specifically, NAP-2 activates chemotaxis and degranulation in neutrophils during inflammation. The gene encoding human PBP maps to chromosome 4q13.3.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PPBP (human) mapping to 4q13.3.

**SOURCE**

PBP (C-24) is a mouse monoclonal antibody raised against PBP of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for inhibition of NAP-2, sc-73636 L, 200 µg/0.1 ml.

PBP (C-24) is available conjugated to agarose (sc-73636 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-73636 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-73636 PE), fluorescein (sc-73636 FITC), Alexa Fluor® 488 (sc-73636 AF488), Alexa Fluor® 546 (sc-73636 AF546), Alexa Fluor® 594 (sc-73636 AF594) or Alexa Fluor® 647 (sc-73636 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-73636 AF680) or Alexa Fluor® 790 (sc-73636 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

PBP (C-24) is recommended for detection of PBP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein [1 ml of cell lysate]), immuno-fluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with PF-4, CXCL-4, IL-8/CXCL-8 or MIG/CAFα/CXCL-1.

Suitable for use as control antibody for PBP siRNA (h): sc-39363, PBP shRNA Plasmid (h): sc-39363-SH and PBP shRNA (h) Lentiviral Particles: sc-39363-V.

Molecular Weight of PBP: 8 kDa.

Positive Controls: human platelet extract: sc-363773.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG HRP-FITC: sc-516140 or m-IgG HRP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG HRP-BP: sc-516102 with DAB, 5OX: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

PBP (C-24): sc-73636. Western blot analysis of PBP expression in human platelet whole cell lysate.

PBP (C-24): sc-73636. Immunoperoxidase staining of formalin fixed, paraffin embedded human spleen tissue showing staining of platelets in red pulp at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.