# abcam

### Product datasheet

## Mouse CXCL7 / PBP ELISA Kit ab236713

Recombinant SimpleStep ELISA

5 Images

Overview

**Product name** 

Mouse CXCL7 / PBP ELISA Kit

**Detection method** 

Colorimetric

**Precision** 

Recovery

Intra-assay SD CV% Mean n

Sample Serum 8 3.4%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			9.3%

Sample type Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 0.216 pg/ml

2.73 pg/ml - 175 pg/ml Range

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	95	91% - 97%
Serum	101	83% - 118%
Hep Plasma	108	106% - 109%
EDTA Plasma	98	90% - 108%
Cit plasma	87	83% - 91%

Assay time 1h 30m

**Assay duration** One step assay

#### Species reactivity

#### **Product overview**

#### Reacts with: Mouse

Mouse CXCL7 / PBP ELISA Kit (ab236713) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CXCL7 / PBP protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse CXCL7 / PBP with 0.216 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

#### **Platform**

Pre-coated microplate (12 x 8 well strips)

#### **Properties**

#### Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse CXCL7 / PBP Capture Antibody	1 x 600µl
10X Mouse CXCL7 / PBP Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
Mouse CXCL7 / PBP Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

#### **Function**

LA-PF4 stimulates 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 human 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. TC-1 and TC-2 are antibacterial proteins, in vitro released from activated platelet alpha-granules. CTAP-III(1-81) is more potent than CTAP-III desensitize chemokine-induced neutrophil activation.

Sequence similarities

Belongs to the intercrine alpha (chemokine CxC) family.

Post-translational modifications

Proteolytic removal of residues 1-9 produces the active peptide connective tissue-activating peptide III (CTAP-III) (low-affinity platelet factor IV (LA-PF4)).

Proteolytic removal of residues 1-13 produces the active peptide beta-thromboglobulin, which is released from platelets along with platelet factor 4 and platelet-derived growth factor.

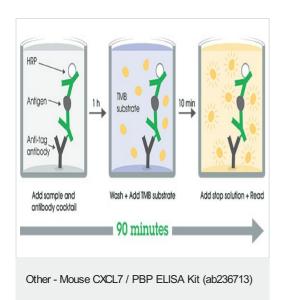
NAP-2(1-66) is produced by proteolytical processing, probably after secretion by leukocytes other than neutrophils.

NAP-2(73) and NAP-2(74) seem not be produced by proteolytical processing of secreted precursors but are released in an active form from platelets.

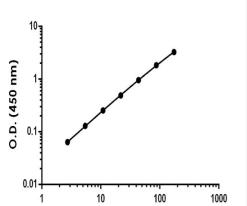
**Cellular localization** 

Secreted.

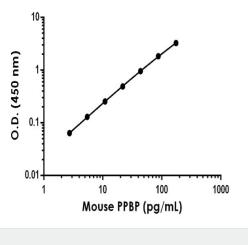
#### **Images**



SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

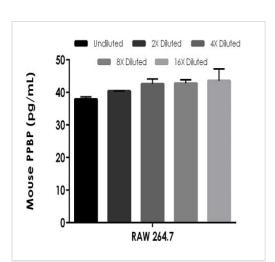


Example of mouse PPBP standard curve in Sample Diluent NS.



Undiluted 2X Diluted 4X Diluted 30000 8X Diluted 16X Diluted Mouse PPBP (ng/mL) 20000 10000 Plasma Plasma Plasma Serum Citrate Heparin EDTA

Interpolated concentrations of native PPBP in mouse serum, plasma and cell culture supernatant samples.

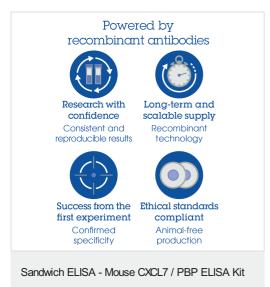


Interpolated concentrations of native PPBP in mouse RAW 264.7 cell supernatant (100%).

Background-subtracted data values (mean +/- SD) are graphed.

The concentrations of PPBP were measured in duplicates, interpolated from the PPBP standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:160K, plasma (citrate) 1:80K, plasma (heparin) 1:20K, plasma (EDTA) 1:20K and RAW 264.7 cell supernatant 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PPBP concentration was determined to be 23,028.15 ng/mL in serum, 1008.09 ng/mL in plasma (citrate) and 2447.06 ng/ml in plasma (heparin), 2828.45 ng/mL in plasma (EDTA).

The concentrations of PPBP were measured in duplicate and interpolated from the PPBP standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PPBP concentration was determined to be 41.45 pg/ml.



To learn more about the advantages of recombinant antibodies see **here**.

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