Anti-PBP Antibody [SC58-09]

ET1610-18

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Zebrafish
Applications:	WB, IF-Cell, IF-Tissue, IHC-P, IP
Molecular Wt:	Predicted band size: 21 kDa
Clone number:	SC58-09

Description: Members of the a-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 chemotactic for neutrophils. The platelet basic protein (PBP), a member of the a(lpha)-chemokine family, resides in the a(lpha)-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)), b-thromboglobulin (b-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 4q12-q13.

Immunogen: Synthetic peptide within Human PBP aa 53-96 / 187.

Positive control: Mouse brain tissue lysate, SiHa cell lysate, mouse cerebellum tissue lysate, PC-3M, human kidney tissue, mouse brain tissue, mouse kidney tissue.

Subcellular location: Cytoplasm.

Database links: SwissProt: P30086 Human | P70296 Mouse | P31044 Rat

Recommended Dilutions:

WB	1:1,000-1:5,000
IF-Cell	1:50-1:200
IF-Tissue	1:50-1:200
IHC-P	1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

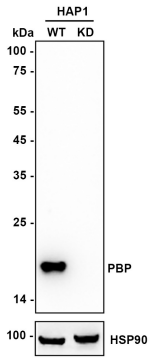

Fig1: Western blot analysis of PBP on different lysates with Rabbit anti-PBP antibody (ET1610-18) at 1/1,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-PBP KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 21 kDa
Observed band size: 21 kDa

Exposure time: 40 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1610-18) at 1/1,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

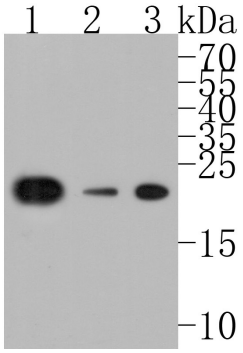

Fig2: Western blot analysis of PBP on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1610-18, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: Mouse brain tissue lysate
Lane 2: SiHa cell lysate
Lane 1: Mouse cerebellum tissue lysate

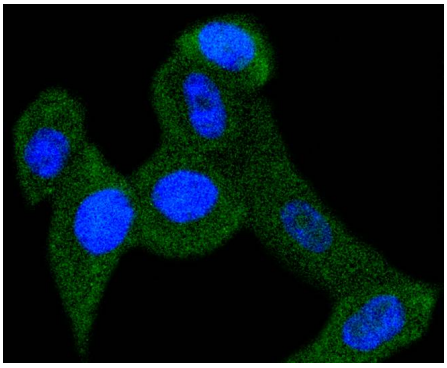

Fig3: ICC staining of PBP in PC-3M cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1610-18, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

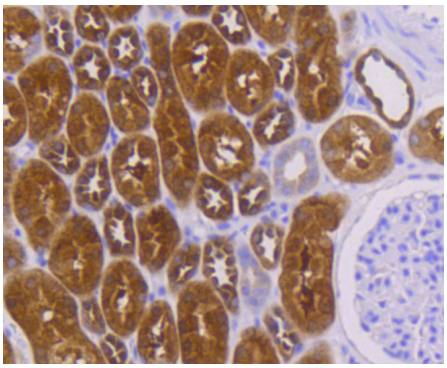

Fig4: Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-PBP antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1610-18, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

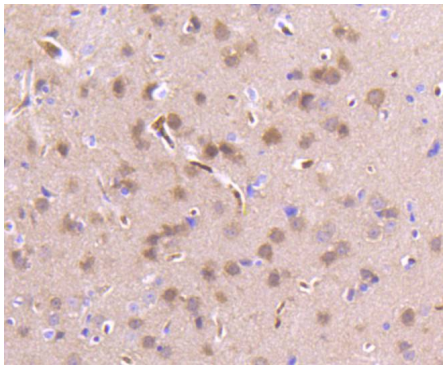

Fig5: Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-PBP antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1610-18, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

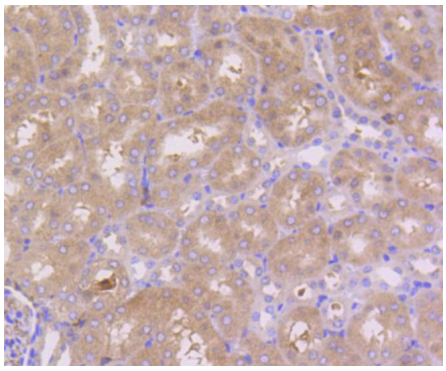

Fig6: Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-PBP antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1610-18, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Al-Mulla F et al. Clinical implications for loss or diminution of expression of Raf-1 kinase inhibitory protein and its phosphorylated form in ductal breast cancer. Am J Cancer Res 3:446-64 (2013).
2. Kato D et al. Co-localization of hippocampal cholinergic neurostimulating peptide precursor with collapsin response mediator protein-2 at presynaptic terminals in hippocampus. Neurosci Lett 517:92-7 (2012).