

## Anti-PBP/PEBP1 Antibody Picoband®

Catalog Number: A01668

### About PEBP1

PEBP1 (Phosphatidylethanolamine-binding protein 1), also called PBP, RKIP, inhibits the phosphorylation and activation of MEK by RAF1. PEBP1 is identical to the phosphatidylethanolamine-binding protein (PBP) with a relative molecular mass of 23 kD. The PEBP1 gene is mapped on 12q24.23. PEBP1 coimmunoprecipitates with RAF1 and MEK from cell lysates and colocalizes with RAF1 when examined by confocal microscopy. PEBP1 overexpression interferes with the activation of MEK and ERK, induction of AP1-dependent reporter genes, and transformation elicited by an oncogenically activated RAF1 kinase. PEBP1 expression was rapidly upregulated during induction of chemotherapy-triggered apoptosis in human prostate and breast cancer cell lines, and maximal RKIP expression correlated perfectly with the onset of apoptosis by Chatterjee et al (2004). RKIP depletion decreased the mitotic index, the number of metaphase cells, traversal times from nuclear envelope breakdown to anaphase, and an override of mitotic checkpoints induced by spindle poisons.

### Overview

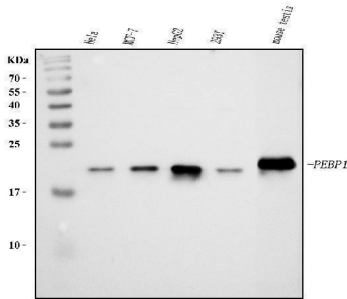
Product Name	Anti-PBP/PEBP1 Antibody Picoband®
Reactive Species	Human, Mouse
Description	Boster Bio Anti-PBP/PEBP1 Antibody Picoband® catalog # A01668. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P30086

### Technical Details

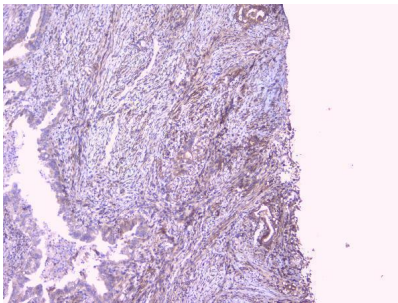
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PBP, which shares 87.5% and 80% amino acid (aa) sequence identity with mouse and rat PBP, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.

Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells

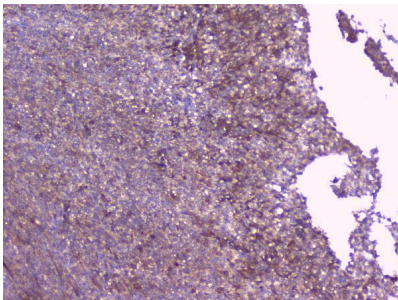
## Anti-PBP/PEBP1 Antibody Picoband® (A01668) Images



Western blot analysis of PBP using anti-PBP antibody (A01668). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human 293T whole cell lysates, Lane 5: mouse testis lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PBP antigen affinity purified polyclonal antibody (Catalog # A01668) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PBP at approximately 21 kDa. The expected band size for PBP is at 21 kDa.

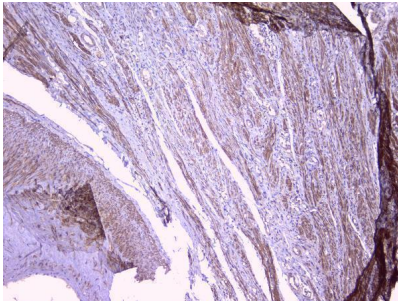


IHC analysis of PBP using anti-PBP antibody (A01668). PBP was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

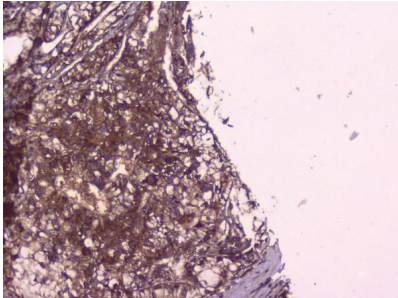


IHC analysis of PBP using anti-PBP antibody (A01668). PBP was detected in paraffin-embedded section of human sarcoma tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

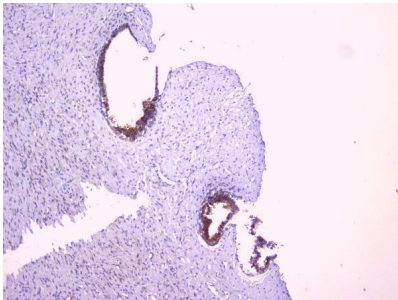
IHC analysis of PBP using anti-PBP antibody (A01668). PBP was detected in paraffin-embedded section of human endometrial carcinoma tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then



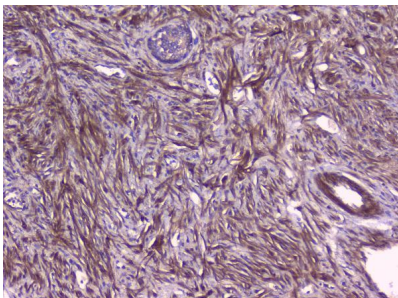
incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of PBP using anti-PBP antibody (A01668). PBP was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

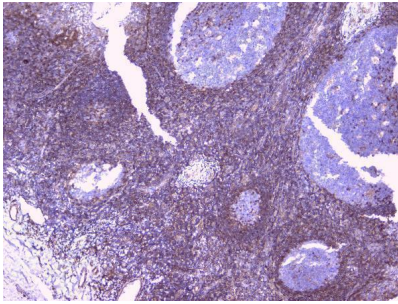


IHC analysis of PBP using anti-PBP antibody (A01668). PBP was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

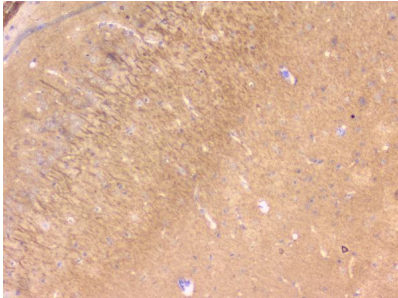


IHC analysis of PBP using anti-PBP antibody (A01668).PBP was detected in paraffin-embedded section of human pancreatic cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

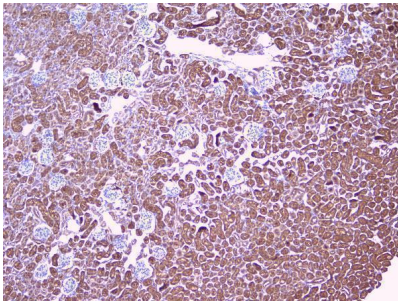
IHC analysis of PBP using anti-PBP antibody (A01668). PBP was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and



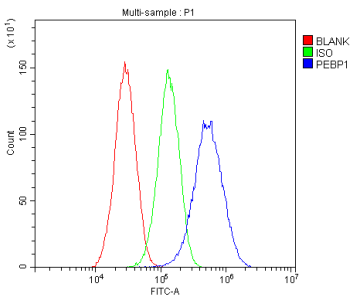
incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of PBP using anti-PBP antibody (A01668). PBP was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of PBP using anti-PBP antibody (A01668).PBP was detected in paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PBP Antibody (A01668) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Flow Cytometry analysis of HepG2 cells using anti-PBP antibody (A01668). Overlay histogram showing HepG2 cells stained with A01668 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PBP Antibody (A01668,1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Submit a product review to [Biocompare.com](https://www.biocompare.com)

Submit a review of this product to [Biocompare.com](https://www.biocompare.com) to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



**Anti-PBP/PEBP1 Antibody**

For Research Use Only. Not for use in diagnostic procedures.