

## Anti-PBP/PEBP1 Antibody

Catalog Number: PA1713

### 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
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-PBP/PEBP1 Antibody catalog # PA1713. Tested in IHC, WB applications. This antibody reacts with Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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	P70296

### Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of mouse PBP, identical to the related rat sequence.
Predicted Reactive Species	Hamster
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	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Rat, By Heat</p> <p>Western blot, 0.1-0.5ug/ml, Mouse, Rat</p>

## Anti-PBP/PEBP1 Antibody (PA1713) Images

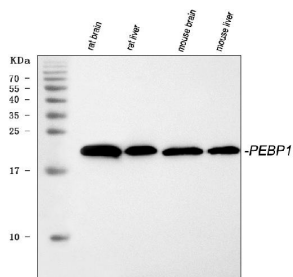


Figure 1. Western blot analysis of PEBP1 using anti-PEBP1 antibody (PA1713).

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: rat brain tissue lysates,

Lane 2: rat liver tissue lysates,

Lane 3: mouse brain tissue lysates,

Lane 4: mouse liver tissue 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-PEBP1 antigen affinity purified polyclonal antibody (Catalog # PA1713) 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 PEBP1 at approximately 21 kDa. The expected band size for PEBP1 is at 21 kDa.

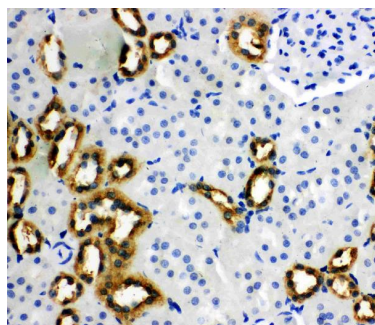


Figure 2. IHC analysis of PEBP1 using anti-PEBP1 antibody (PA1713).

PEBP1 was detected in a paraffin-embedded section of Rat Kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-PEBP1 Antibody (PA1713) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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