

**Anti-PBP Antibody**  
**Catalog # ABO11023****Specification**

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**Anti-PBP Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC                |
| Primary Accession | <a href="#">P70296</a> |
| Host              | Rabbit                 |
| Reactivity        | Mouse, Rat             |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

Rabbit IgG polyclonal antibody for Phosphatidylethanolamine-binding protein 1(PEBP1) detection. Tested with WB, IHC-P in Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-PBP Antibody - Additional Information**

**Gene ID** 23980

**Other Names**

Phosphatidylethanolamine-binding protein 1, PEBP-1, HCNPpp, Hippocampal cholinergic neurostimulating peptide, HCNP, Pebp1, Pbp, Pebp

**Calculated MW**

20830 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Mouse, By Heat  
Western blot, 0.1-0.5 µg/ml, Rat, Mouse

**Subcellular Localization**

Cytoplasm.

**Tissue Specificity**

HCNP is expressed in brain. Increased expression in aged senescence-accelerated mice.

**Protein Name**

Phosphatidylethanolamine-binding protein 1(PEBP-1)

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of mouse PBP(15-29aa QEVDEPPQHALRVDY), identical to the related rat sequence.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-PBP Antibody - Protein Information**

**Name** Pebp1

**Synonyms** Pbp, Pebp

**Function**

Binds ATP, opioids and phosphatidylethanolamine. Has lower affinity for phosphatidylinositol and phosphatidylcholine. Serine protease inhibitor which inhibits thrombin, neuropsin and chymotrypsin but not trypsin, tissue type plasminogen activator and elastase. Inhibits the kinase activity of RAF1 by inhibiting its activation and by dissociating the RAF1/MEK complex and acting as a competitive inhibitor of MEK phosphorylation (By similarity).

**Cellular Location**

Cytoplasm.

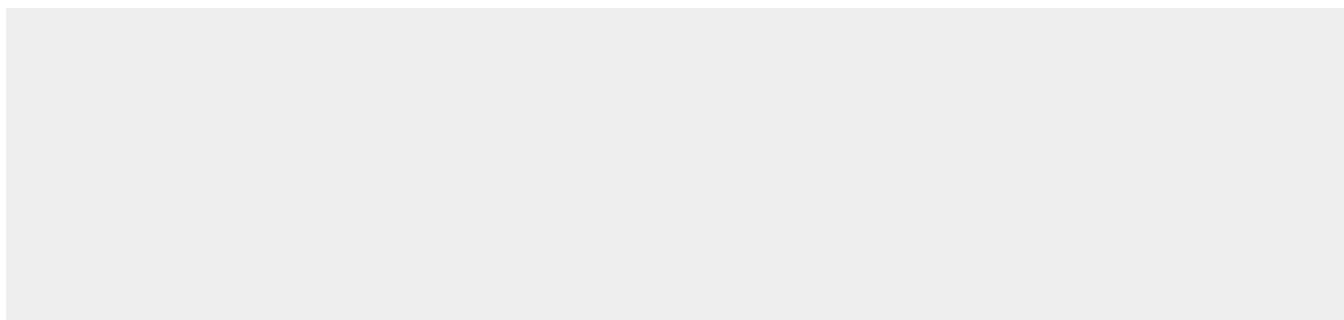
**Tissue Location**

HCNP is expressed in brain. Increased expression in aged senescence-accelerated mice

**Anti-PBP Antibody - Protocols**

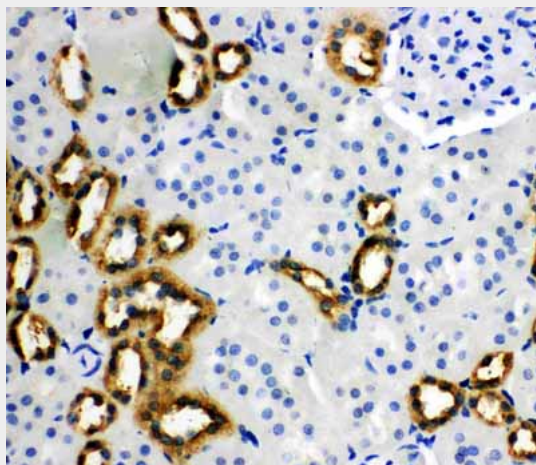
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-PBP Antibody - Images**



Anti-PBP antibody, ABO11023, Western blotting All lanes: Anti PBP (ABO11023) at 0.5ug/ml  
Lane 1: Rat Brain Tissue Lysate at 50ug  
Lane 2: Rat Lung Tissue Lysate at 50ug  
Lane 3: Rat Liver Tissue Lysate at 50ug  
Predicted bind size: 21KD  
Observed bind size: 21KD



Anti-PBP antibody, ABO11023, IHC(P)  
IHC(P): Rat Kidney Tissue

### Anti-PBP Antibody - Background

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.