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# PPP1CB Antibody (C-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP13874b**

## Specification

### PPP1CB Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | P62140 |
| Other Accession | Q6GQL2, P62142, P62143, P61292, P62141, P62207, Q3SWW9, NP_002700.1, NP_996759.1 |
| Reactivity | **Human** |
| Predicted | **Bovine, Chicken, Mouse, Pig, Rabbit, Rat, Xenopus** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **37187** |
| Antigen Region | **298-327** |

### PPP1CB Antibody (C-term) - Additional Information

**Gene ID** 5500

**Other Names**
Serine/threonine-protein phosphatase PP1-beta catalytic subunit, PP-1B, PPP1CD, PPP1CB

**Target/Specificity**
This PPP1CB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 298-327 amino acids from the C-terminal region of human PPP1CB.

**Dilution**
WB~~1:1000

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
PPP1CB Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### PPP1CB Antibody (C-term) - Protein Information

**Name** PPP1CB

**Function** Protein phosphatase that associates with over 200 regulatory proteins to form highly specific holoenzymes which dephosphorylate hundreds of biological targets. Protein phosphatase (PP1) is essential for cell division, it participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. Component of the PTW/PP1 phosphatase complex, which plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase. In balance with CSNK1D and CSNK1E, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. May dephosphorylate CSNK1D and CSNK1E. Dephosphorylates the 'Ser-418' residue of FOXP3 in regulatory T-cells (Treg) from patients with rheumatoid arthritis, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed:23396208).

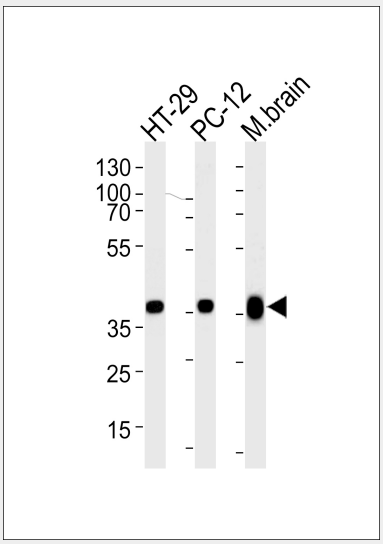
**Cellular Location**
Cytoplasm. Nucleus. Nucleus, nucleoplasm. Nucleus, nucleolus. Note=Highly mobile in cells and can be relocalized through interaction with targeting subunits. In the presence of PPP1R8 relocalizes from the nucleus to nuclear speckles.

## PPP1CB Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## PPP1CB Antibody (C-term) - Images




Western blot analysis of lysates from HT-29, PC-12 cell line and mouse brain tissue lysate (from left to right), using PPP1CB Antibody (C-term) (Cat. #AP13874b). AP13874b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

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## PPP1CB Antibody (C-term) - Background

The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Mouse studies suggest that PP1 functions as a suppressor of learning and memory. Two alternatively spliced transcript variants encoding distinct isoforms have been observed.

## PPP1CB Antibody (C-term) - References

Lee, J.H., et al. J. Biol. Chem. 285(32):24466-24476(2010)
Fujiki, R., et al. Nature 459(7245):455-459(2009)
Mavaddat, N., et al. Cancer Epidemiol. Biomarkers Prev. 18(1):255-259(2009)
Sueyoshi, T., et al. Mol. Pharmacol. 73(4):1113-1121(2008)
Rikova, K., et al. Cell 131(6):1190-1203(2007)