

**PPP1CB Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13874b****Specification**

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**PPP1CB Antibody (C-term) Blocking peptide - Product Information**Primary Accession [P62140](#)**PPP1CB Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 5500**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13874b was selected from the C-term region of PPP1CB. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**PPP1CB Antibody (C-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/23396208" target="\_blank">23396208</a>).

**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) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**PPP1CB Antibody (C-term) Blocking peptide - Images****PPP1CB Antibody (C-term) Blocking peptide - 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) Blocking peptide - 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)