

## DESCRIPTION

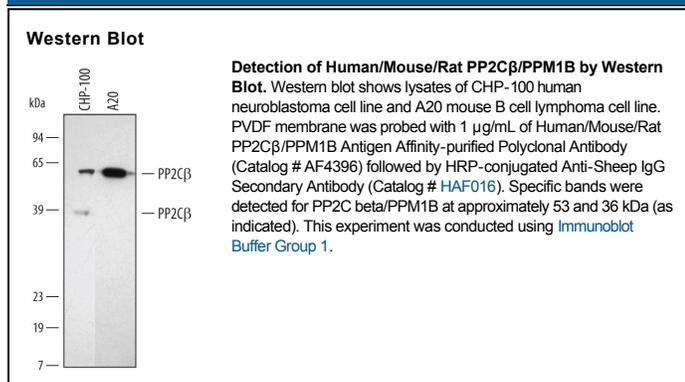
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects endogenous human, mouse and rat PP2C $\beta$ in Western blots. In Western blots, this antibody does not cross-react with recombinant human PP2C $\alpha$ or PP2C $\delta$ .
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PP2C $\beta$ Met1-Gly378 Accession # O75688
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the [Technical Information](#) section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 $\mu$ g/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Protein phosphatase 2C beta (PP2C $\beta$ ), also called protein phosphatase, magnesium-dependent type 1B (PPM1B), preferentially dephosphorylates serine and threonine residues on proteins. There are five splice variants with sizes of 53, 43, 42, 36, and 21 kDa. This enzyme is resistant to inhibitors of other protein phosphatases such as okadaic acid and calyculin. Association of PP2C $\beta$  with I $\kappa$ B kinase inhibits its phosphorylating activity and is regulated by TNF $\alpha$  stimulation. PP2C $\beta$  is found in many cell types and tissues, especially muscle. The mRNA for PP2C $\beta$  accumulates in mature spermatocytes and metaphase-arrested, unfertilized oocytes. Knockout of PP2C $\beta$  in mice is lethal prior to embryo implantation.