

## DESCRIPTION

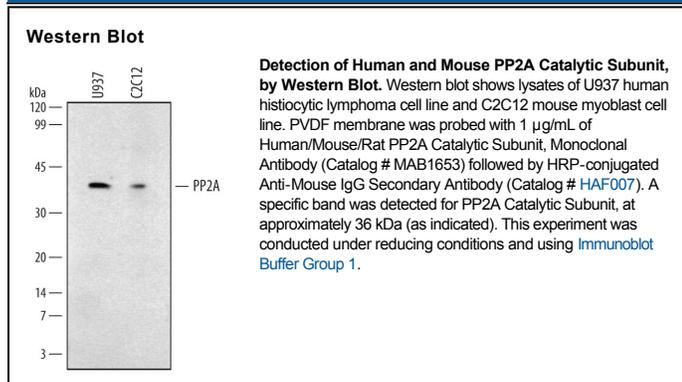
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects endogenous human, mouse, and rat PP2A in Western blots. Because PP2A- $\alpha$ and PP2A- $\beta$ catalytic subunits are identical in the region used for the immunogen, it is expected that both isoforms will be detected by the antibody.
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 234529
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PP2A- $\alpha$ catalytic subunit Trp209-Leu309 Accession # P67775
<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 0.5 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 2A (PP2A) dephosphorylates serine and threonine residues in proteins. This ubiquitously expressed enzyme plays a critical role in modulating cell survival, growth factor responses, and neurotransmission. Phosphorylation near the C-terminus at Y307 of the catalytic subunit decreases the phosphatase activity of PP2A and reduces its ability to bind to proteins such as CD28 and the glutamate receptor GluR5. Phosphorylation of PP2A at Y307 is highest during M-phase and lowest during S-phase of the cell cycle. Transient PP2A phosphorylation at this site is also observed in growth factor-stimulated cells.