

## DESCRIPTION

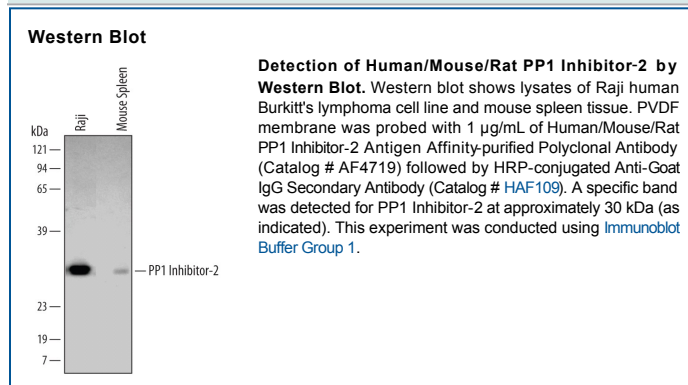
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects endogenous human, mouse and rat PP1 Inhibitor-2 in Western blots. In Western blots, this antibody does not cross-react with recombinant human PP1 Inhibitor-1 or DARPP-32.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PP1 Inhibitor-2 Met1-Ser205 Accession # P41236
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

## 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 µg/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.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month from date of receipt, 2 to 8 °C, reconstituted.</li> <li>● 6 months from date of receipt, -20 to -70 °C, reconstituted.</li> </ul>

## BACKGROUND

Protein Phosphatase 1 Inhibitor-2 (PP1 Inhibitor-2), also called PP1 regulatory subunit 2 (PP1R2), I2, and IPP2, binds to PP1 through an RVxF consensus sequence. The complex inactivates PP1, preventing it from dephosphorylating substrates such as glycogen phosphorylase. Unlike PP1 Inhibitor-1, the binding of PP1 Inhibitor-2 is Protein Kinase A phosphorylation-independent. Dissociation of the PP1 Inhibitor-2 complex is enhanced by phosphorylation at T72 by GSK3, ERK, or CDK. Overexpression of PP1 Inhibitor-2 in mouse heart improves cardiac function without changing organ size.