

## DESCRIPTION

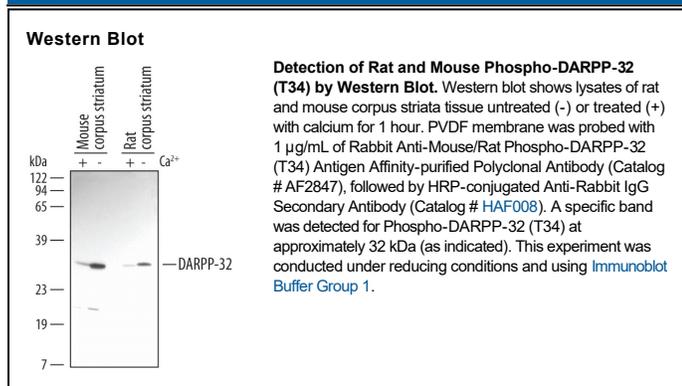
<b>Species Reactivity</b>	Mouse/Rat
<b>Specificity</b>	Detects mouse and rat DARPP-32 when phosphorylated at T34 in Western blots. There is weak cross-reactivity with phosphorylated PP1 Inhibitor-1, which contains a nearly identical phosphorylation site. Reactivity with human Phospho-DARPP-32 has not been confirmed.
<b>Source</b>	Polyclonal Rabbit IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Phosphopeptide containing mouse DARPP-32 T34 site
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm 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 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. *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

Dopamine- and cAMP-Regulated Neuronal Phosphoprotein, Mr 32 kDa (DARPP-32), also known as PPP1R1B, is a 23 kilodalton protein which anomalously migrates at about 32 - 35 kDa on SDS-PAGE. When phosphorylated at T34 by protein kinase A (PKA), it is a potent inhibitor of protein phosphatase 1 (PP1). Dephosphorylation of DARPP-32 at T34 is achieved primarily by the calcium-dependent activation of the phosphatase calcineurin. DARPP-32 is expressed almost exclusively in neuronal tissues, with highest levels in dopamine-innervated neurons. Phosphorylation of DARPP-32 at T34 has been used as an index of PKA activation.