

DESCRIPTION

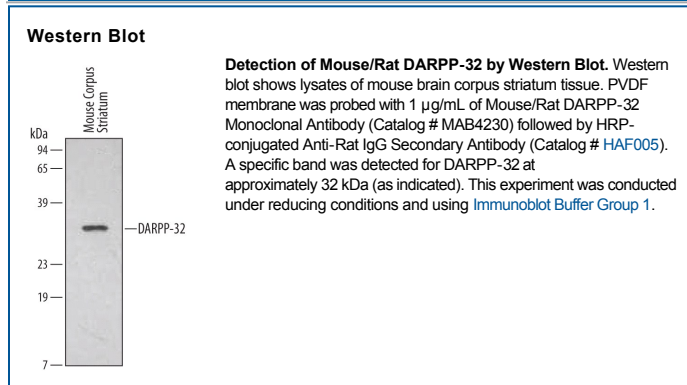
Species Reactivity	Mouse/Rat
Specificity	Detects mouse and rat DARPP-32. Reactivity with human DARPP-32 has not been tested.
Source	Monoclonal Rat IgG _{2A} Clone # 375604
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DARPP-32 Ala51-Thr204 Accession # Q9UD71.2
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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
Western Blot	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	Perfusion fixed paraffin-embedded sections of rat brain (corpus striatum)

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Dopamine- and cAMP-Regulated Phosphoprotein, Mr 32 kDa (DARPP-32), also known as PPP1R1B, is a 23 kilodalton protein that anomalously migrates at about 32-35 kDa on SDS-PAGE. When phosphorylated at T34 by protein kinase A (PKA), DARPP-32 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.