

DESCRIPTION

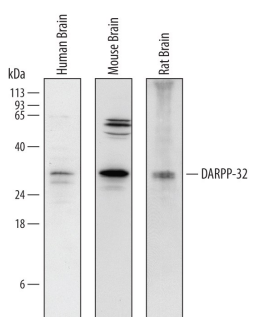
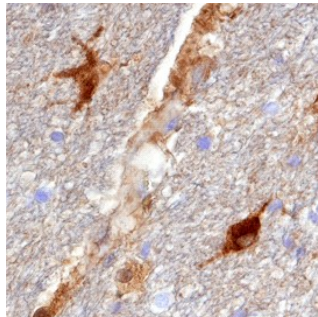
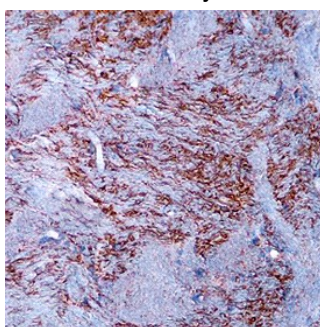
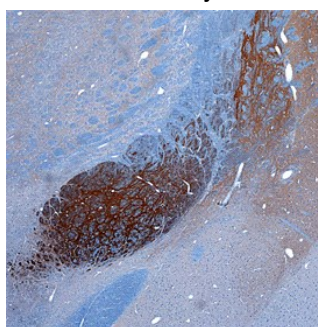
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat DARPP-32 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human DARPP-32 Arg51-Ala204 Accession # Q94D71
Formulation	Lyophilized from a 0.2 µm 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	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human, Mouse, and Rat DARPP-32 by Western Blot. Western blot shows lysates of human brain tissue, mouse brain tissue, and rat brain tissue. PVDF Membrane was probed with 1 µg/mL of Goat Anti-Human/Mouse/Rat DARPP-32 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6259) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for DARPP-32 at approximately 32 - 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>DARPP-32 in Human Brain. DARPP-32 was detected in immersion fixed paraffin-embedded sections of human brain (hippocampus) using Goat Anti-Human/Mouse/Rat DARPP-32 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6259) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to neurons and glial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
<p>Immunohistochemistry</p>  <p>DARPP-32 in Mouse Brain. DARPP-32 was detected in perfusion fixed frozen sections of mouse brain (caudate putamen) using Goat Anti-Human/Mouse/Rat DARPP-32 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6259) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal processes. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>	<p>Immunohistochemistry</p>  <p>DARPP-32 in Rat Brain. DARPP-32 was detected in perfusion fixed frozen sections of rat brain (globus pallidus) using Goat Anti-Human/Mouse/Rat DARPP-32 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6259) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal processes. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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 kDa 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.