

DATASHEET

Version: 2016-08-17

DARPP-32 Antibody, pAb, Rabbit**Cat. No.:** A01424-40**Size:** 40 µg**Synonyms:** PPP1R1B antibody ;**Description:**

DARPP-32 (Dopamine- and cAMP-Regulated Neuronal Phosphoprotein, Mr 32 kDa), also known as PPP1R1B, is expressed in medium-sized spiny neurons that also express dopamine D1 receptors. It is a bifunctional signaling molecule that controls serine/threonine kinase and serine/threonine phosphatase activity. Both dopaminergic and glutamatergic (NMDA) receptor stimulation regulate the extent of DARPP32 phosphorylation, but in opposite directions. Dopamine stimulates phosphorylation of DARPP-32 through dopamine D1 receptors and activation of PKA. PKA phosphorylation of DARPP-32 at Thr34 converts it into an inhibitor of protein phosphatase 1. DARPP-32 is converted into an inhibitor of PKA when phosphorylated at Thr75 by cyclin-dependent kinase 5 (CDK5).

GenScript **Rabbit Anti-DARPP-32 Polyclonal Antibody** is developed in rabbit using a KLH-coupled synthetic peptide within residues 150-200 of human DARPP-32 (Swiss Prot: Q9UD71).

Immunogen: KLH-coupled synthetic peptide within residues 150-200 of human DARPP-32 (Swiss Prot: Q9UD71).

Host: Rabbit**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Formulation:**

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide

Ig Subclass: Rabbit IgG

Specificity: GenScript Rabbit Anti-DARPP-32 Polyclonal Antibody detects endogenous levels of mouse and rat DARPP-32. Predicted to react with human DARPP-32 according to sequence homology.

Positive Control: Mouse brain and rat brain**Purification:** Immunoaffinity chromatography**Applications:**

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western blot: 0.5-1 µg/ml**Flow cytometry:** 1-3 µg for 1 x 10⁶ cells**Other Applications:** user-optimized

Species Reactivity: Mouse and rat. Reactivity to other species is not tested yet.

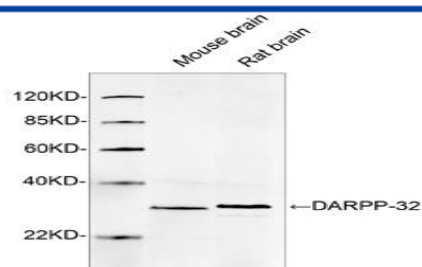
Reconstitution:

Reconstitute the lyophilized powder with deionized water (or equivalent) to an antibody concentration of 0.5 mg/ml.

Storage:

The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example

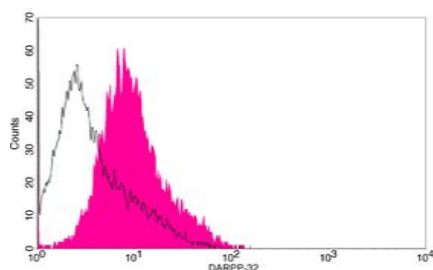


Western blot analysis of tissue lysates using 1 µg/ml DARPP-32 Antibody, pAb, Rabbit (GenScript, A01424)

The signal was developed with IRDye™ 800 Conjugated Goat Anti-Rabbit IgG.

Predicted Size: 32 KD

Observed Size: 32 KD



Flow cytometric analysis of Ramos cells using DARPP-32

Antibody, pAb, Rabbit (GenScript, A01424; shaded histogram)

or with an isotype control antibody (GenScript, A01008; open histogram), followed by R-PE conjugated anti-rabbit IgG.