

Anti-DARPP-32 Antibody

Product Data Sheet · P/N 74085 Rev 01 · Reissued 2026-09-19 (layout only)

Product code	Pack size
P40003-100	100 µL
Host Species	Rabbit (Polyclonal)
Mr (kDa)	32

Description

DARPP-32 is a dopamine (DA) and cAMP- regulated ~32k phosphoprotein that is associated with dopaminoceptive neurons (Fienberg et al., 1998). The protein inhibits protein phosphatase I when it is phosphorylated on Thr34. In contrast, when DARPP-32 is phosphorylated on Thr75 the protein acts as an inhibitor of PKA (Bibb et al., 1999). Phosphorylation of DARPP-32 is thought to play a critical role in the regulation of dopaminergic neurotransmission. In addition, the activity of DARPP-32 is also thought to play important roles in the actions of alcohol, caffeine and Prozac® (Malvae et al., 2002; Lindskog et al., 2002; Svenningsson et al., 2002).

Immunogen

Peptide corresponding to amino acid residues from the N-terminal region of rat DARPP- 32, conjugated to keyhole limpet hemocyanin (KLH).

Species Reactivity

The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will also react with bovine, canine, chicken, human, mouse, non-human primate and Xenopus based on the fact that these species have 100% homology with the amino acid sequence used as antigen.

Physical State

Liquid; Buffer contents: 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per mL BSA and 50% glycerol

Purification Method

Prepared from rabbit serum by affinity purification via chromatography on an affinity column prepared with the N-terminal peptide used as antigen.

Recommended Antibody Dilutions

WB: 1:1000

IHC: 1:250

Storage/Stability

Stable at -20 °C for at least 1 year.

For long term storage -20 °C is recommended

Shipping Conditions

Domestic: Blue Ice

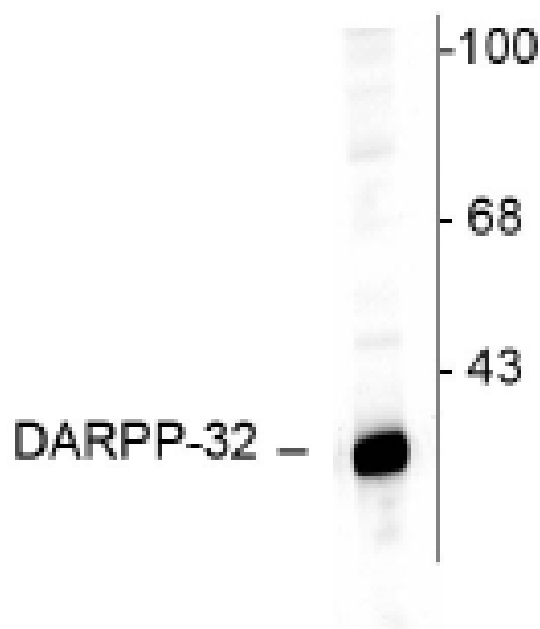
International: Blue Ice or Dry Ice

References

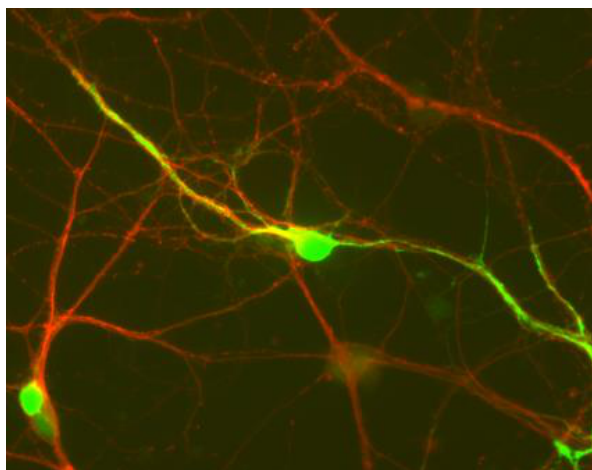
1) Bibb JA et al. (1999) Nature (London) 402:669-671.

2) Fienberg, AA et al. (1998) Science 281:838-842.

- 3) Lindskog M et al. (2002) Nature (London) 418:774-778.
- 4) Maldve RE et al. (2002) Nature Neurosci 5:641-648.
- 5) Svenningsson P et al. (2002) Proc Natl Acad Sci USA 99:3182-3187.



Western Blot Rat hippocampal lysate showing specific immunolabeling of the ~32k DARPP protein.



Immunostaining Cultured CD1 mouse striatal cells showing specific labeling of DARPP-32 in green and Tuj1 in red. Cells and photo courtesy of QBMCellScience.

For research use or further manufacturing only. Not for use in diagnostic procedures, or for human or animal consumption.