

Anti-DARPP-32 (Thr34) Antibody

Our Anti-DARPP-32 (Thr34) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions i
Catalog # AN1354

Specification

Anti-DARPP-32 (Thr34) Antibody - Product Information

Primary Accession	Q6J4I0
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	22913

Anti-DARPP-32 (Thr34) Antibody - Additional Information

Gene ID **360616**

Other Names

DARPP32 antibody, DARPP-32 antibody, Dopamine and cAMP regulated neuronal phosphoprotein 32 antibody, Dopamine and cAMP regulated neuronal phosphoprotein antibody, Dopamine and cAMP regulated phosphoprotein antibody, Dopamine and cAMP regulated phosphoprotein DARPP 32 antibody, Dopamine and cAMP regulated phosphoprotein DARPP32 antibody, Dopamine- and cAMP-regulated neuronal phosphoprotein antibody, FLJ20940 antibody, IPPD antibody, Neuronal phosphoprotein DARPP 32 antibody, PPP1R1B antibody, PPR1B_HUMAN antibody, Protein phosphatase 1 regulatory (inhibitor) subunit 1B antibody, Protein phosphatase 1 regulatory inhibitor subunit 1B antibody, Protein phosphatase 1 regulatory subunit 1B antibody

Target/Specificity

DARPP-32 is a dopamine (DA) and cAMP-regulated ~32k phosphoprotein that is associated with dopaminergic neurons (Fienberg et al., 1998). The protein inhibits protein phosphatase I when it is phosphorylated on Thr-34. In contrast, when DARPP-32 is phosphorylated on Thr-75 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® (Malde et al., 2002; Lindskog et al., 2002; Svenningsson et al., 2002).

Format

Antigen Affinity Purified from Pooled Serum

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-DARPP-32 (Thr34) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

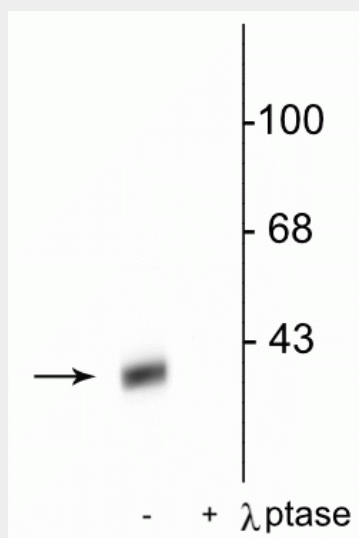
Blue Ice

Anti-DARPP-32 (Thr34) Antibody - Protocols

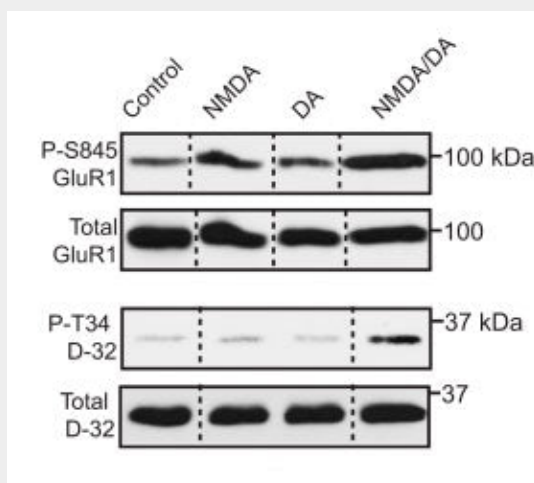
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-DARPP-32 (Thr34) Antibody - Images



Western blot of rat striatal lysate showing specific immunolabeling of the ~32 kDa DARPP-32 phosphorylated at Thr34 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 min).



Effects of striatal slice treatment with NMDA (25 μ M, 5 min), dopamine (DA, 10 μ M, 15 min), or both on PKA-dependent phosphorylation of Ser845 GluR1 (top) and Thr34 DARPP-32 (bottom). Image from publication CC-BY-4.0. PMID: 35835216

Anti-DARPP-32 (Thr34) Antibody - Background

DARPP-32 is a dopamine (DA) and cAMP-regulated ~32k phosphoprotein that is associated with dopaminergic neurons (Fienberg et al., 1998). The protein inhibits protein phosphatase I when it is phosphorylated on Thr-34. In contrast, when DARPP-32 is phosphorylated on Thr-75 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® (Maldve et al., 2002; Lindskog et al., 2002; Svenningsson et al., 2002).