

**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	<a href="#">Q6J4I0</a>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>22913</b>

**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**

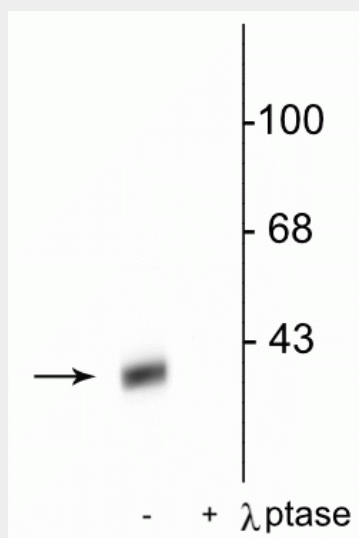
Blue Ice

## Anti-DARPP-32 (Thr34) Antibody - Protocols

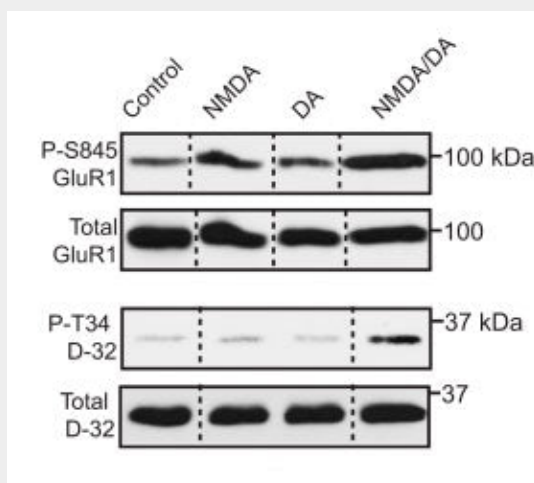
Provided below are standard protocols that you may find useful for product applications.

- [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  $\mu$ M, 5 min), dopamine (DA, 10  $\mu$ 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).