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Anti-DARPP-32 (Thr34) Antibody

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

Product Information

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

Additional Information

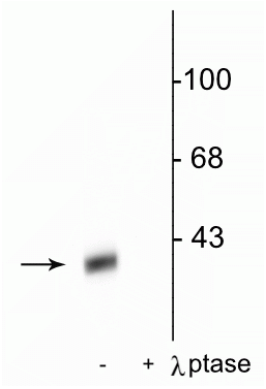
Gene ID	360616
Other Names	DARPP32 antibody, DARPP-32 antibody, Dopamine and cAMP regulated neuronal phosphoprotein 32 antibody, Dopamine and cAMP regulated neuronal phosphoprotein antibody, Dopamine and cAMP regulated phosphoprotein antibody, Dopamine and cAMP regulated phosphoprotein DARPP 32 antibody, 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 dopaminoceptive 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).
Dilution	WB~~1:1000
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

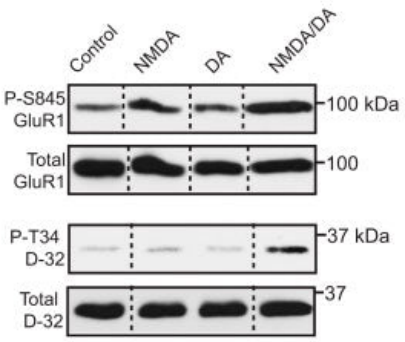
Background

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 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).

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 μM, 5 min), dopamine (DA, 10 μM, 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