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DARPP 32 (phospho Thr75) Antibody

CATALOG NUMBER: XPS-1005

Western blot of rat caudate lysate showing phosphospecific immunolabeling of the ~32k DARPP-32 protein phosphorylated at Thr75.

Specifications

SPECIES REACTIVITY:	Human, Mouse
TESTED APPLICATIONS:	WB
APPLICATIONS:	Applications include Dot Blots (DB) and Western Blots (WB). Suitability for Immunohistochemistry (IHC) has not yet been determined. Rabbit anti-DARPP-32 (Thr75) recognizes human and mouse forms of the protein. When internally tested under ideal conditions the working dilutions were 1:1000 for DB and WB.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
PREDICTED MOLECULAR WEIGHT:	32
SPECIFICITY:	DARPP 32 antibody is specific for the ~34k DARPP-32 phosphorylated at Thr75.
IMMUNOGEN:	DARPP-32 (Thr75) polyclonal antibody was raised against a synthetic phosphopeptide corresponding to amino acids residues surrounding the phospho Thr75 of DARPP-32. The sequence of the immunogen is identical in human and mouse.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	Affinity Purified
PHYSICAL STATE:	Liquid
BUFFER:	100 uL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per mL BSA and 50% glycerol.
STORAGE CONDITIONS:	For long term storage -80˚C is recommended, but shorter term storage at -20˚C is also acceptable as aliquots may be taken without freeze/thawing due to the presence of 50% glycerol. Stock solutions are stable for a minimum of 1 year at -20˚C.
CLONALITY:	Polyclonal
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	Darpp32, Darpp-32, DARPP-32,
ACCESSION NO.:	Q6J4I0
PROTEIN GI NO.:	81884861
OFFICIAL SYMBOL:	Ppp1r1b
GENE ID:	360616

Background

BACKGROUND:	DARPP-32, a dopamine (DA) and cAMP-regulated ~32k phosphoprotein, is associated with dopaminoceptive neurons bearing D-1 receptors in the basal ganglia. 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. Phosphorylation of DARPP 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®.
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