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Product datasheet for AP09490PU-S

DARPP32 (PPP1R1B) pThr75 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF
Recommended Dilution:	Immunofluorescence: 1/100 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthesized KLH phosphopeptide derived from human DARPP-32 around the phosphorylation site of threonine 75 (A-Y-TP-P-P).
Specificity:	DARPP-32 (Phospho-Thr75) Antibody detects endogenous levels of DARPP-32 only when phosphorylated at threonine 75.
Formulation:	Phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid purified IgG
Concentration:	lot specific
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Store at 4°C for short term use. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	32 kd.
Gene Name:	protein phosphatase 1 regulatory inhibitor subunit 1B
Database Link:	Entrez Gene 19049 MouseEntrez Gene 360616 RatEntrez Gene 84152 Human Q9UD71

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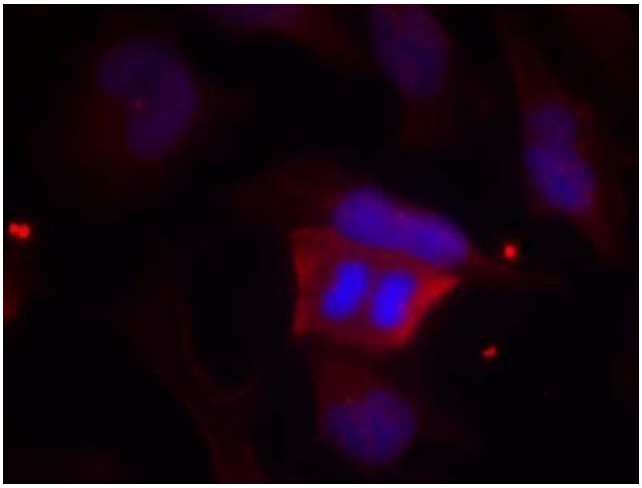
Background: DARPP32 is expressed in medium-sized spiny neurons that also express dopamine D1 receptors. The function of DARPP32 seems to be regulated by receptor stimulation. Both dopaminergic and glutamatergic (NMDA) receptor stimulation regulate the extent of DARPP32 phosphorylation, but in opposite directions. Dopamine D1 receptor stimulation enhances cAMP formation, resulting in the phosphorylation of DARPP32 and phosphorylated DARPP32 is a potent protein phosphatase 1. NMDA receptor stimulation elevates intracellular calcium, which leads to activation of calcineurin and dephosphorylation of phospho DARPP32, thereby reducing the phosphatase 1 inhibitory activity of DARPP32.

Synonyms: PPP1R1B, DARPP-32, FLJ20940

Protein Families: Druggable Genome

Product images:



Immunofluorescence staining of methanol-fixed HeLa cells using DARPP-32 (Phospho-Thr75) Antibody