## For Research Use Only

# DARPP32 Polyclonal antibody

Catalog Number: 10748-1-AP 3 Publications



**Purification Method:** 

WB 1:500-1:2000

IHC 1:50-1:500

IF-P 1:50-1:500

IF/ICC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

**Basic Information** 

Catalog Number: GenBank Accession Number:

10748-1-AP BC001519
Size: GeneID (NCBI):
150ul , Concentration: 1000 ug/ml by 84152

Nanodrop and 333 ug/ml by Bradford UNIPROT ID: method using BSA as the standard; Q9UD71

Source: Full Name: Rabbit protein pho

Rabbit protein phosphatase 1, regulatory
Isotype: (inhibitor) subunit 1B

IgG Calculated MW:
Immunogen Catalog Number: 23 kDa

AG1216 Observed MW: 32 kDa

**Applications** 

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IF

Species Specificity: human, mouse, rat

Cited Species: mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 **Positive Controls:** 

WB: mouse brain tissue, rat brain tissue IHC: mouse brain tissue, rat brain tissue

IF-P: mouse brain tissue,
IF/ICC: SH-SY5Y cells,

# Background Information

Dopamine- and cAMP-regulated neuronal phosphoprotein (DARPP32), also known as protein phosphatase 1 regulatory subunit 1B (PPP1R1B), is a substrate of cAMP-dependent protein kinase (PKA) enriched in dopamine-innervated brain areas. Overexpression of DARPP32 has been shown to block gefitinib-induced apoptosis in gastric tumors by promoting EGFR and ERBB3 heterodimerization (PMID: 21741919). DARPP32 also drives gefitinib-refractory lung tumor growth through similar ERBB3-mediated resistance mechanisms(PMID: 34675407). The molecular weight of DARPP32 is about 32 kDa.

#### Notable Publications

Author	Pubmed ID	Journal	Application
Xiong Yang	33214696	Acta Pharmacol Sin	WB
Sheng Chen	26122704	CNS Neurosci Ther	IF
Heng Ai	37979890	Free Radic Biol Med	WB

Storage

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

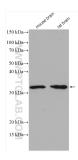
\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

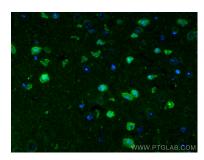
### **Selected Validation Data**



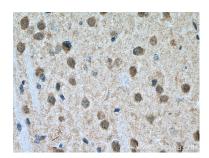
Various lysates were subjected to SDS PAGE followed by western blot with 10748-1-AP (DARPP32 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



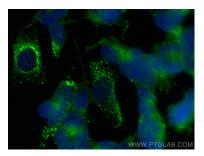
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 10748-1-AP (DARPP32 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using DARPP32/PPP1R1B antibody (10748-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 10748-1-AP (DARPP32 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using DARPP32/PPP1R1B antibody (10748-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).