### 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:

10748-1-AP

Size:

GeneID (NCBI):

1000 ug/ml

Source:

Rabbit

Q9UD71

Isotype:

GeneID (NCBI):

GeneID (NCBI):

Full Name:

protein phosphatase 1, regulatory
(inhibitor) subunit 1B

Immunogen Catalog Number: (inhibitor) subunit
AG1216 Calculated MW:

Observed MW: 32 kDa

23 kDa

**Applications** 

Tested Applications: WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IF

Species Specificity: human, mouse, rat Cited Species:

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

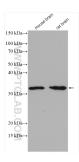
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

W: ptgcn.cor

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

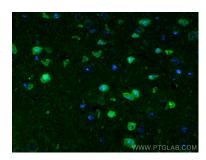
## **Selected Validation Data**



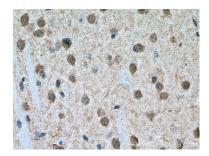
Various lysates were subjected to SDS PAGE followed by western blot with 10748-1-AP (DARPP32 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



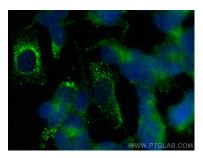
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 10748-1-AP (DARPP32 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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-SYSY cells using DARPP32/PPP1R1B antibody (10748-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).