# For Research Use Only

# DARPP32/PPP1R1B Polyclonal antibody



Catalog Number: 10748-1-AP

3 Publications

### **Basic Information**

Catalog Number: 10748-1-AP

GeneID (NCBI):

BC001519

GenBank Accession Number:

150ul, Concentration: 1000 µg/ml by 84152 Nanodrop and 333 µg/ml by Bradford Full Name: protein phosphatase 1, regulatory

method using BSA as the standard;

(inhibitor) subunit 1B Rabbit Calculated MW: 23 kDa Isotype: IgG Observed MW: Immunogen Catalog Number: 32 kDa

AG1216

Size:

**Purification Method:** Antigen affinity purification Recommended Dilutions:

WB 1:500-1:2000 IHC 1:50-1:500 IF 1:50-1:500

### **Applications**

**Tested Applications:** IF, IHC, WB, ELISA Cited Applications:

IF. WB

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: mouse brain tissue.

# **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 dopamineinnervated 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 gefitinibrefractory 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:

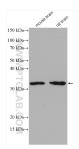
Store at -20°C. Stable for one year after shipment.

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

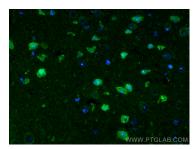
## **Selected Validation Data**



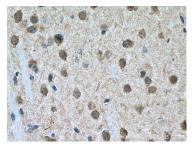
Various lysates were subjected to SDS PAGE followed by western blot with 10748-1-AP (DARPP32 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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).