### For Research Use Only

# PDE1A Polyclonal antibody

Catalog Number: 12442-2-AP

Featured Product

**5 Publications** 



**Basic Information** 

Catalog Number: GenBank Accession Number: 12442-2-AP BC022480
Size: GeneID (NCBI): 700 µg/ml 5136
Source: UNIPROT ID: Rabbit P54750

Isotype: Full Name:
IgG phosphodiesterase 1A, calmodulin-

Immunogen Catalog Number: dependent

AG3157 Calculated MW:

545 aa, 61 kDa Observed MW: 61 kDa Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:1000-1:6000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500

**Applications** 

Tested Applications: IHC, IP, WB, ELISA Cited Applications: WB, IHC

Species Specificity: human, mouse, rat Cited Species: human, 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, human brain tissue, rat brain

tissue

IP: mouse brain tissue,

IHC: mouse brain tissue, human gliomas tissue

## **Background Information**

PDE1A(Calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1A) is also named as Cam-PDE 1A, 61 kDa Cam-PDE, hCam-1 and belongs to the cyclic nucleotide phosphodiesterase (PDEs) family. The PDEs play a role in signal transduction by regulating intracellular cyclic nucleotide concentrations through hydrolysis of cAMP and/or cGMP to their respective nucleoside 5-prime monophosphates. This protein has 9 isoforms produced by alternative splicing with the molecular weight from 57 kDa to 63 kDa. There is a report showing the major 67-kD PDE1A isoform identified in human sperm associates tightly with calmodulin and is not activated by Ca(2+)/calmodulin(PMID:12135876).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Jeremy R Egbert	31087036	Biol Reprod	WB
Jeremy R Egbert	27009040	Biol Reprod	
Xiaofang Wang	28750036	PLoS One	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

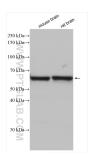
For technical support and original validation data for this product please contact:

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

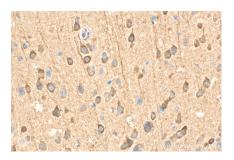
W: ptgcn.coi

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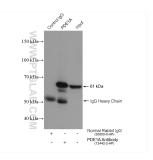
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 12442-2-AP (PDE1A antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 12442-2-AP (PDE1A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PDE1A (IP:12442-2-AP, 4ug; Detection:12442-2-AP 1:1000) with mouse brain tissue lysate 2080 ug.