

For Research Use Only

# PDE1A Polyclonal antibody

Catalog Number: 12442-2-AP

Featured Product

5 Publications



## Basic Information

**Catalog Number:**

12442-2-AP

**Size:**

700 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG3157

**GenBank Accession Number:**

BC022480

**GeneID (NCBI):**

5136

**UNIPROT ID:**

P54750

**Full Name:**

phosphodiesterase 1A, calmodulin-dependent

**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 µg 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:

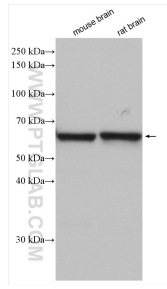
T: 4006900926

E: Proteintech-CN@ptglab.com

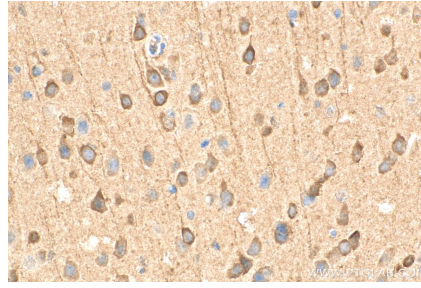
W: ptgcn.com

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

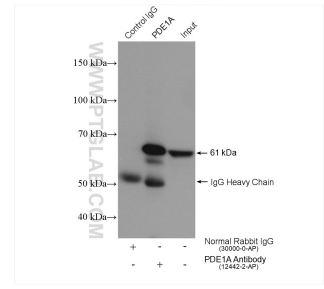
## Selected Validation Data



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



Immunohistochemical analysis of paraffin-embedded 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 1:1.000) with mouse brain tissue lysate 2080 ug.