

For Research Use Only

# PDE1A Polyclonal antibody

Catalog Number: 12442-2-AP

Featured Product

5 Publications



## Basic Information

Catalog Number:

12442-2-AP

Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

Tested Applications:

WB, IP, IHC, 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

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

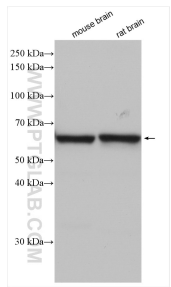
For technical support and original validation data for this product please contact:

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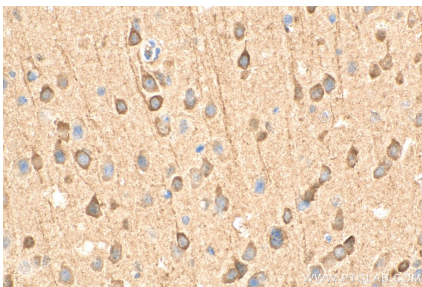
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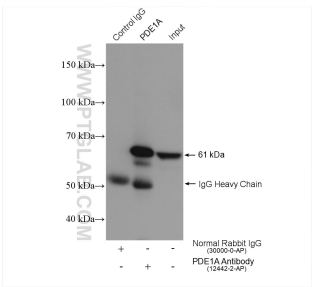
Selected Validation Data



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 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 1:1000) with mouse brain tissue lysate 2080 ug.