

For Research Use Only

# PRKAR1A Polyclonal antibody

Catalog Number: 20358-1-AP **1 Publications**



## Basic Information

<b>Catalog Number:</b> 20358-1-AP	<b>GenBank Accession Number:</b> BC036285	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 1000 µg/ml by Nanodrop and 620 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 5573	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IHC 1:50-1:500 IF 1:20-1:200
<b>Source:</b> Rabbit	<b>Full Name:</b> protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1)	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 381 aa, 43 kDa	
<b>Immunogen Catalog Number:</b> AG14216	<b>Observed MW:</b> 43-45 kDa	

## Applications

<b>Tested Applications:</b> IF, IHC, WB, ELISA	<b>Positive Controls:</b> WB : HeLa cells, mouse cerebellum tissue
<b>Cited Applications:</b> WB	<b>IHC :</b> mouse brain tissue,
<b>Species Specificity:</b> human, mouse, rat	<b>IF :</b> HeLa cells,
<b>Cited Species:</b> human	

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

PKA is a heterotetramer inactive kinase composed of two regulatory and two catalytic subunits. The regulatory subunits are encoded by four genes (PRKAR1A, PRKAR2A, PRKAR1B, and PRKAR2B). PRKAR1A, a gene coding for the cAMP-dependent protein kinase (PKA) 1 $\alpha$  regulatory subunit, is located on human chromosome 17q22-24. PRKAR1A protein insufficiency and PKA dysregulation have been implicated in various types of disorders, including Albright hereditary osteodystrophy (AHO), pseudohypoparathyroidism (PHP), acrodysostosis (ACRDYS), and Carney complex. PRKAR1A protein expression level was significantly dysregulated in multiple primary carcinomas and distant metastases, such as cardiac myxomas, odontogenic myxomas, anaplastic thyroid carcinomas, breast cancer, pediatric pituitary adenomas, and Schwann cell tumors.

## Notable Publications

Author	Pubmed ID	Journal	Application
Susanne Zellner	33545068	Mol Cell	WB

## Storage

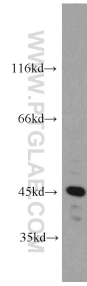
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

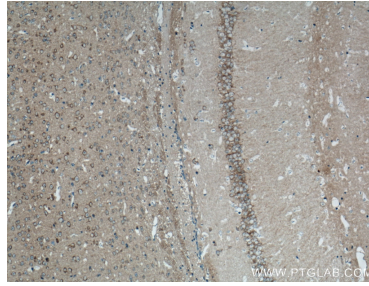
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

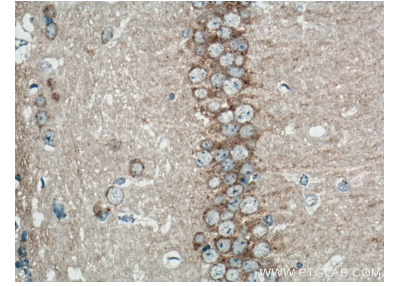
## Selected Validation Data



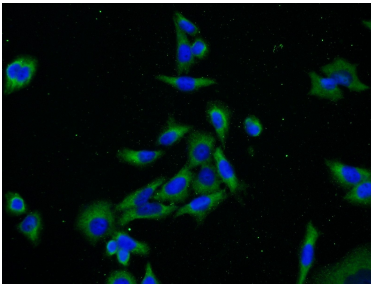
HeLa cells were subjected to SDS PAGE followed by western blot with 20358-1-AP (PRKAR1A antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20358-1-AP (PRKAR1A antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20358-1-AP (PRKAR1A 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 HeLa cells using 20358-1-AP (PRKAR1A antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).