

For Research Use Only

# Calbindin-D28k Polyclonal antibody

Catalog Number: 14479-1-AP

Featured Product

38 Publications



## Basic Information

### Catalog Number:

14479-1-AP

### Size:

150ul, Concentration: 300 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5861

### GenBank Accession Number:

BC006478

### GeneID (NCBI):

793

### UNIPROT ID:

P05937

### Full Name:

calbindin 1, 28kDa

### Calculated MW:

30 kDa

### Observed MW:

28 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:1000-1:4000

IF-P: 1:200-1:800

IF-Fro: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF-P, IF-Fro, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, monkey, chicken

**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, mouse cerebellum tissue, rat brain tissue

**IP**: mouse brain tissue,

**IHC**: human cerebellum tissue, hippocampus, human brain tissue, mouse cerebellum tissue, rat cerebellum tissue, human kidney tissue, mouse kidney tissue, rat kidney tissue

**IF-P**: mouse cerebellum tissue, human kidney tissue

**IF-Fro**: mouse cerebellum tissue, rat cerebellum tissue

## Background Information

Calbindin-D28k is a member of the calcium-binding protein superfamily that includes calmodulin and troponin C. It is a cytosolic calcium binding protein highly expressed in the distal tubule, intestines, central nervous system, primary murine osteoblast cells and in several other organs. It plays an important role in the intracellular calcium homeostasis, its strong buffering capacity prevents cytotoxic effect of high concentration of free calcium in kidney, brain, pancreas, and intestine.

## Notable Publications

Author	Pubmed ID	Journal	Application
Takahiro Seki	30342995	Mol Cell Neurosci	IF
Rui Zhang	34762817	Mol Ther	IHC,IF
Biji Mathew	32452260	Autophagy	IF

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

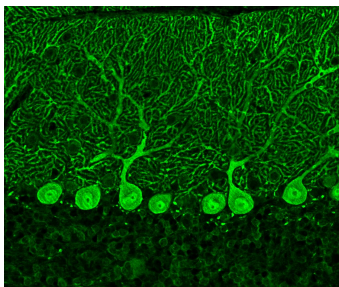
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

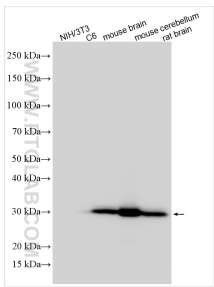
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

Selected Validation Data



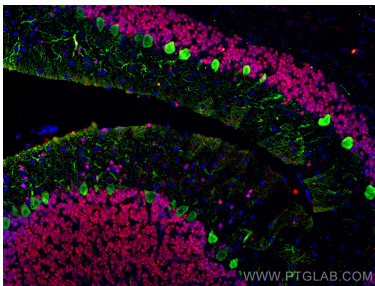
Immunofluorescent analysis of (4% PFA) fixed adult mouse cerebellum tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:1500 and Alexa Fluor 594 AffiniPure Donkey Anti-Rabbit IgG (H+L). (Image produced by Watt Lab at McGill University)



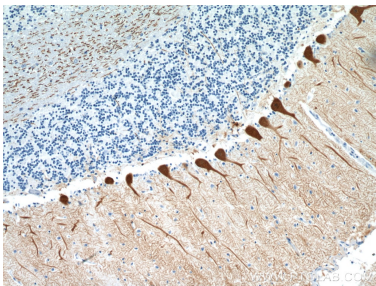
Various lysates were subjected to SDS PAGE followed by western blot with 14479-1-AP (Calbindin-D28k antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. (Negative control: NIH/3T3, C6)



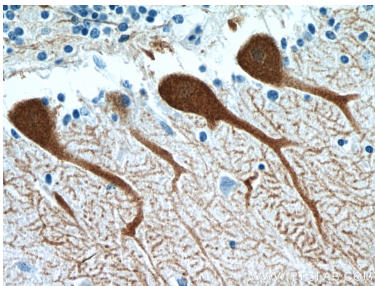
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), PAX6 antibody (67529-1-Ig, Clone: 2C5A1, red).



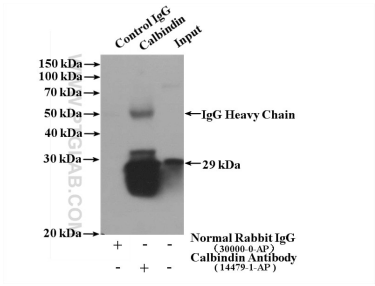
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), PAX6 antibody (67529-1-Ig, Clone: 2C5A1, red).



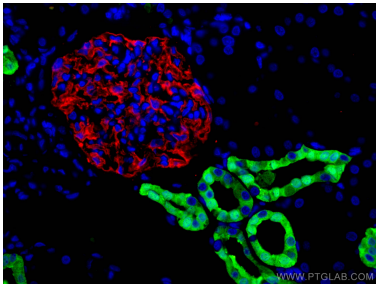
Immunohistochemical analysis of paraffin-embedded human cerebellum tissue slide using 14479-1-AP (Calbindin-D28k antibody) at dilution of 1:2000 (under 10x lens).



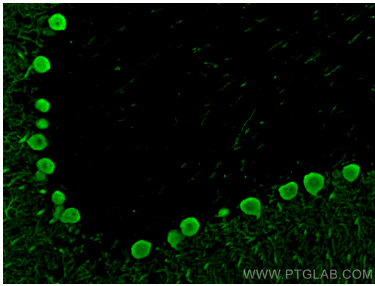
Immunohistochemical analysis of paraffin-embedded human cerebellum tissue slide using 14479-1-AP (Calbindin-D28k antibody) at dilution of 1:2000 (under 40x lens).



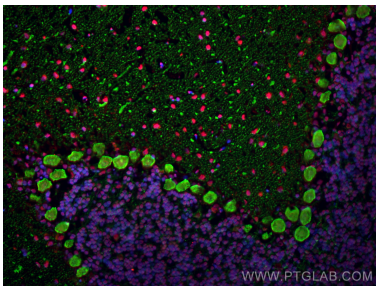
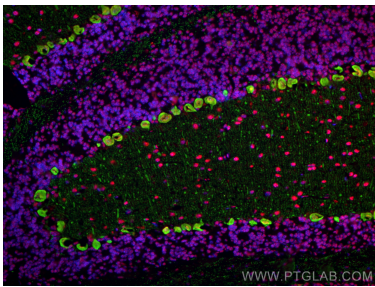
IP result of anti-Calbindin-D28k (IP:14479-1-AP, 4ug; Detection:14479-1-AP 1:1000) with mouse brain tissue lysate 4000ug.



Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), PTPRO antibody (67000-1-Ig, Clone: 2F2B4, red).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse cerebellum tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse cerebellum tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), FUS/TLS antibody (68262-1-Ig, Clone: 1B4F8, red).

Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded rat cerebellum tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), FUS/TLS antibody (68262-1-Ig, Clone: 1B4F8, red).