## For Research Use Only

# Calbindin-D28k Polyclonal antibody

Catalog Number:14479-1-AP

Featured Product

24 Publications

GenBank Accession Number:



**Basic Information** 

Catalog Number:

14479-1-AP BC006478
Size: GeneI D (NCBI):

Size: GeneID (NCBI) 150ul , Concentration: 300 µg/ml by 793

Nanodrop; UNIPROT ID:

Source: P05937
Rabbit Full Name:
Isotype: calbindin 1, 28kDa
IgG Calculated MW:

Immunogen Catalog Number: 30 kDa

AG5861 Observed MW:

28 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions: WB 1:1000-1:8000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:1000-1:4000 IF 1:50-1:500

**Applications** 

**Tested Applications:** 

WB, IP, IF, IHC, ELISA

Cited Applications: WB, IF, IHC

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Species Specificity: human, mouse, rat

Cited Species: human, rat, 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 kidney tissue, human brain 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: mouse cerebellum tissue, human kidney tissue, mouse kidney 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 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.

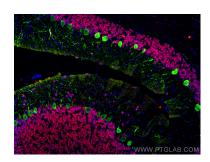
#### Selected Validation Data



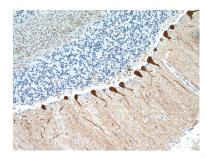
Various lysates were subjected to SDS PAGE followed by western blot with 14479-1-AP (Calbindin-D28k antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



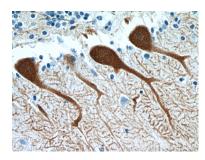
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), PAX6 antibody (67529-1-Ig, Clone: 2C5A1, red).



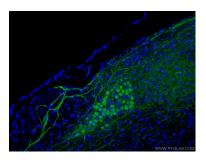
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using Calbindin-D28k antibody (14479-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), PAX6 antibody (67529-1-Ig, Clone: 2C5A1, red).



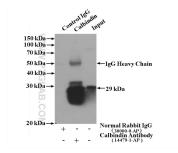
Immunohistochemical analysis of paraffinembedded human cerebellum tissue slide using 14479-1-AP (Calbindin-D28k antibody) at dilution of 1:2000 (under 10x lens).



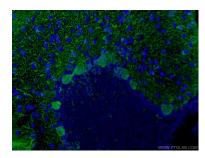
Immunohistochemical analysis of paraffinembedded human cerebellum tissue slide using 14479-1-AP (Calbindin-D28k antibody) at dilution of 1:2000 (under 40x lens).



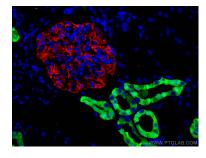
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using 14479-1-AP (Calbindin-D28k antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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 mouse cerebellum tissue using 14479-1-AP (Calbindin-D28k antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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).