

For Research Use Only

# Calbindin-D28k Monoclonal antibody



Catalog Number: 66394-1-Ig **9 Publications**

## Basic Information

|  |  |   |
|--|--|---|
| <b>Catalog Number:</b><br>66394-1-Ig       | <b>GenBank Accession Number:</b><br>BC006478 | <b>Purification Method:</b><br>Protein A purification                                     |
| <b>Size:</b><br>1500 µg/ml                 | <b>GeneID (NCBI):</b><br>793                 | <b>CloneNo.:</b><br>1F8B9   |
| <b>Source:</b><br>Mouse                    | <b>UNIPROT ID:</b><br>P05937                 | <b>Recommended Dilutions:</b><br>WB 1:5000-1:50000<br>IHC 1:8000-1:32000<br>IF 1:50-1:500 |
| <b>Isotype:</b><br>IgG1                    | <b>Full Name:</b><br>calbindin 1, 28kDa      |   |
| <b>Immunogen Catalog Number:</b><br>AG5861 | <b>Calculated MW:</b><br>30 kDa              |   |
|  | <b>Observed MW:</b><br>28 kDa                |   |

## Applications

**Tested Applications:**  
IF/ICC, IF-P, IHC, WB, ELISA

**Cited Applications:**  
IHC, IF

**Species Specificity:**  
human, mouse, rat, pig, rabbit, pig

**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 :** rabbit brain tissue, PC-12 cells, fetal human brain tissue, rat brain tissue, mouse brain tissue, pig cerebellum tissue, rabbit cerebellum tissue, rat cerebellum tissue, mouse cerebellum tissue

**IHC :** rat cerebellum tissue, human kidney tissue, human small intestine tissue, human brain tissue, mouse kidney tissue, rat kidney tissue

**IF :** mouse cerebellum tissue, human kidney tissue, PC-12 cells

## 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 |
|----------------|-----------|-------------------|-------------|
| Chang-Hui Chen | 34795559  | Front Neurosci    | IF          |
| Fei Wang       | 33762741  | Cell Death Differ | IF          |
| Changlin Du    | 38314821  | Elife             | 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

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

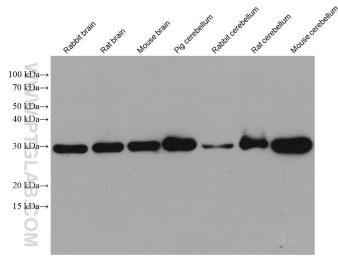
T: 4006900926

E: Proteintech-CN@ptglab.com

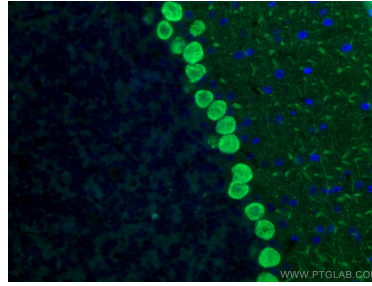
W: ptgcn.com

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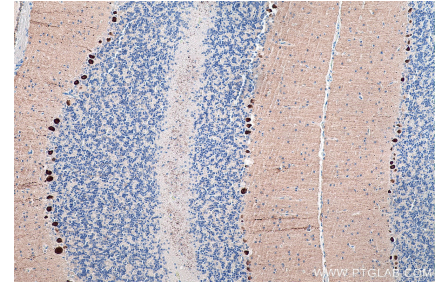
## Selected Validation Data



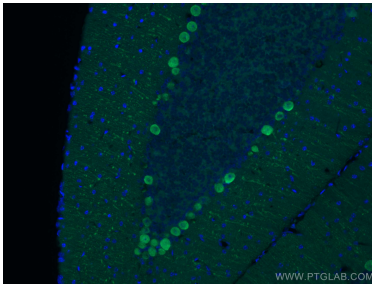
Various lysates were subjected to SDS PAGE followed by western blot with 66394-1-Ig (Calbindin-D28k antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



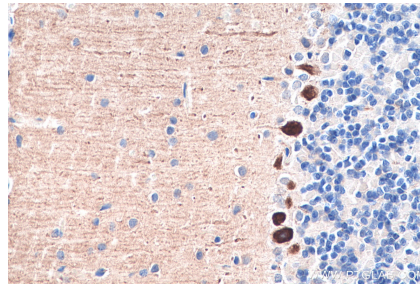
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using 66394-1-Ig (Calbindin-D28k antibody) at dilution of 1:200 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



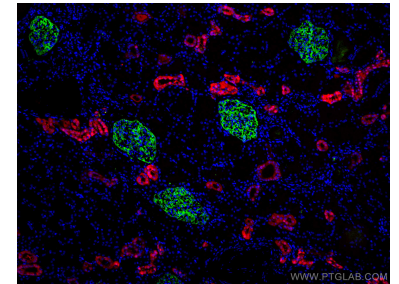
Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue slide using 66394-1-Ig (Calbindin-D28k antibody) at dilution of 1:16000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using 66394-1-Ig (Calbindin-D28k antibody) at dilution of 1:200 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue slide using 66394-1-Ig (Calbindin-D28k antibody) at dilution of 1:16000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using Calbindin-D28k antibody (66394-1-Ig, Clone: 1F8B9) at dilution of 1:300 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Podocalyxin antibody(18150-1-AP, green).