

## Anti-Calbindin Antibody

Our Anti-Calbindin primary antibody from PhosphoSolutions is mouse monoclonal. It detects bovine, hu  
Catalog # AN1323

### Specification

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#### Anti-Calbindin Antibody - Product Information

Application	WB
Primary Accession	<a href="#">P05937</a>
Reactivity	Bovine, Chicken
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Calculated MW	30025

#### Anti-Calbindin Antibody - Additional Information

Gene ID **793**

##### Other Names

avian-type antibody, CAB27 antibody, CALB 1 antibody, CALB antibody, CALB1 antibody, CALB1\_HUMAN antibody, Calbindin 1 28kDa antibody, Calbindin antibody, Calbindin D28 antibody, D 28K antibody, D-28K antibody, D28K antibody, OTTHUMP00000166027 antibody, OTTHUMP00000225441 antibody, RTVL H protein antibody, Vitamin D dependent calcium binding protein antibody, Vitamin D dependent calcium binding protein avian type antibody, Vitamin D-dependent calcium-binding protein antibody

##### Target/Specificity

Calbindin (aka. calbindin D28k) is a member of the calcium-binding protein superfamily that includes calmodulin and troponin C. It is predominantly expressed in certain types of neurons, particularly in dendrites and perikarya of the cerebellum and is thought to buffer entry of calcium upon stimulation of glutamate receptors (Andressen et al., 1993). Calbindin has recently been shown to play a critical role in mitochondrial dysfunction and loss of synaptic proteins in vivo in an Alzheimer's disease mouse model (Kook et al., 2014).

##### Format

Protein G Purified

##### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

##### Precautions

Anti-Calbindin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

##### Shipping

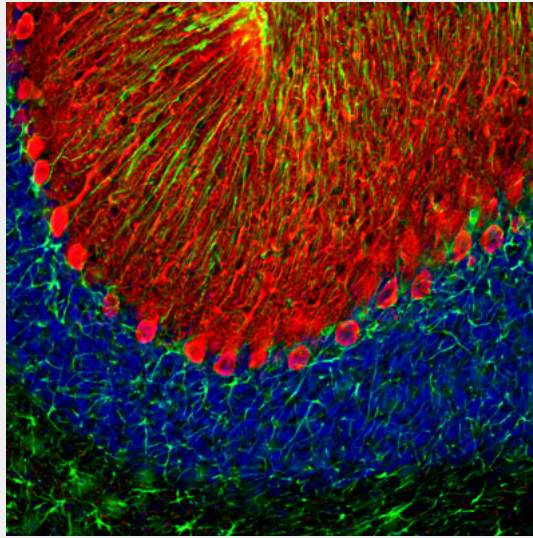
Blue Ice

## Anti-Calbindin Antibody - Protocols

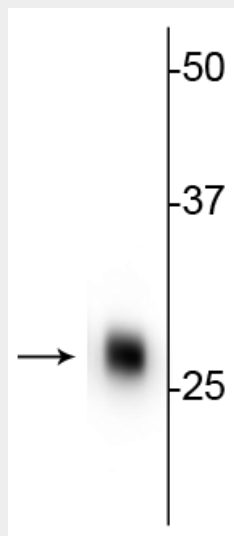
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

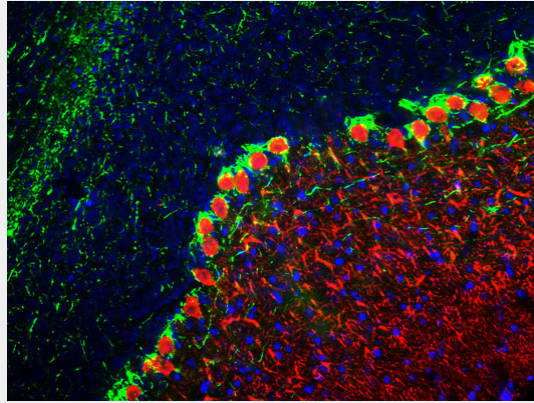
## Anti-Calbindin Antibody - Images



Immunofluorescence of a section of rat cerebellum labeled with anti-calbindin (cat. 302-CALB, 1:2,000, red), colabeled with anti-GFAP ( cat. 620-GFAP , 1:5000,green), and DAPI staining of nuclear DNA. The anti-calbindin prominently labels the dendrites and perikarya of Purkinje cells in the molecular layer of the cerebellum. The anti-GFAP labels the processes of Bergmann glia in the molecular layer and the astroglia in the granular and white layers of the cerebellum.



Western blot of rat cerebellar lysate showing specific immunolabeling of the ~ 28 kDa calbindin protein.



Immunofluorescence of a section of rat cerebellum showing specific labeling of calbindin (cat. 302-CALB, 1:1000, red) in the dendrites of Purkinje cells. Axons are labeled green with anti-Neurofilament H antibody (cat. 1451-NFH, 1:25,000), and additional nuclear staining with DAPI.

#### **Anti-Calbindin Antibody - Background**

Calbindin (aka. calbindin D28k) is a member of the calcium-binding protein superfamily that includes calmodulin and troponin C. It is predominantly expressed in certain types of neurons, particularly in dendrites and perikarya of the cerebellum and is thought to buffer entry of calcium upon stimulation of glutamate receptors (Andressen et al., 1993). Calbindin has recently been shown to play a critical role in mitochondrial dysfunction and loss of synaptic proteins in vivo in an Alzheimer's disease mouse model (Kook et al., 2014).