

**Mouse Monoclonal Antibody to CALB2**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2401a****Specification**

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**Mouse Monoclonal Antibody to CALB2 - Product Information**

Application	WB, FC, E
Primary Accession	<a href="#">P22676</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	31.5kDa KDa

**Description**

This gene encodes an intracellular calcium-binding protein belonging to the troponin C superfamily. Members of this protein family have six EF-hand domains which bind calcium. This protein plays a role in diverse cellular functions, including message targeting and intracellular calcium buffering. It also functions as a modulator of neuronal excitability, and is a diagnostic marker for some human diseases, including Hirschsprung disease and some cancers. Alternative splicing results in multiple transcript variants. ;

**Immunogen**

Purified recombinant fragment of human CALB2 (AA: 172-271) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**Application Note**

ELISA: 1/10000; WB: 1/500 - 1/2000; FCM: 1/200 - 1/400

**Mouse Monoclonal Antibody to CALB2 - Additional Information**

**Gene ID** 794

**Other Names**

CR; CAL2; CAB29

**Dilution**

WB~~1:1000

FC~~1:10~50

E~~N/A

**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**

Mouse Monoclonal Antibody to CALB2 is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Monoclonal Antibody to CALB2 - Protein Information

**Name** CALB2 ([HGNC:1435](#))

**Synonyms** CAB29

### Function

Calcium-binding protein involved in calcium homeostasis and signal transduction. It plays a critical role in buffering intracellular calcium levels and modulating calcium-dependent signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/2001709" target="\_blank">2001709</a>). Predominantly expressed in specific neuronal populations, influences synaptic plasticity and neuronal excitability, contributing to learning and memory (By similarity). During embryonic development, it facilitates neuronal differentiation and maturation (By similarity).

### Cellular Location

Synapse {ECO:0000250|UniProtKB:Q08331}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q08331}. Note=Located in dendrioles, small dendrites that makes up a brush structure found as the terminal specialization of a dendrite of a unipolar brush cell {ECO:0000250|UniProtKB:Q08331}

### Tissue Location

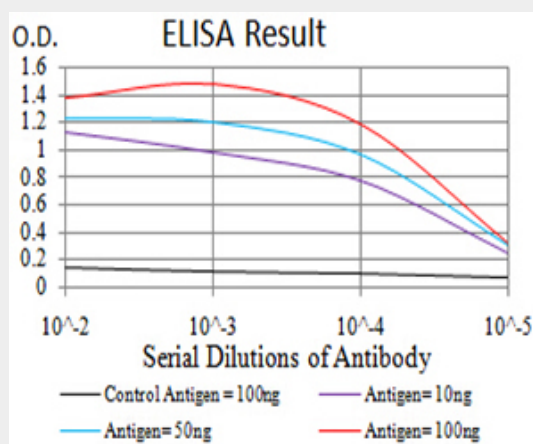
Brain.

## Mouse Monoclonal Antibody to CALB2 - Protocols

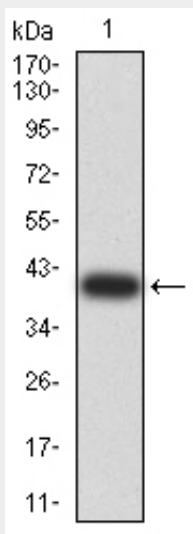
Provided below are standard protocols that you may find useful for product applications.

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

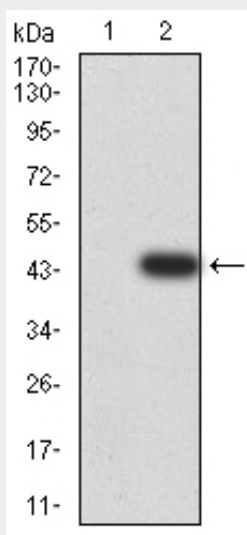
## Mouse Monoclonal Antibody to CALB2 - Images



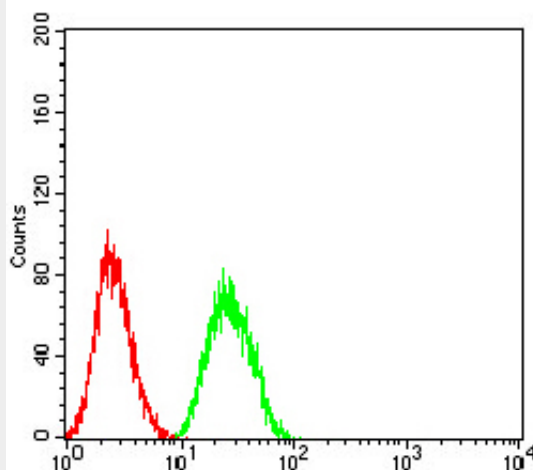
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



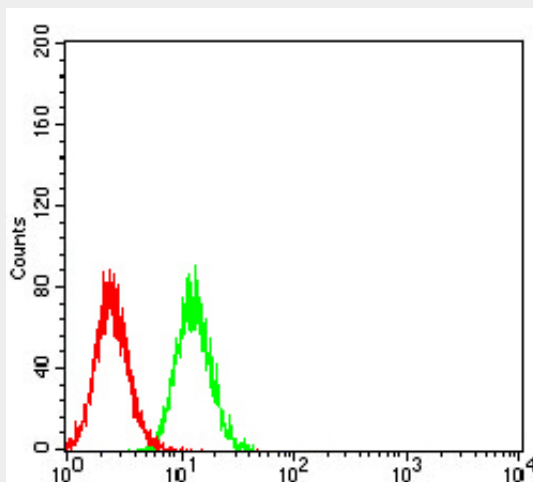
Western blot analysis using CALB2 mAb against human CALB2 (AA: 172-271) recombinant protein. (Expected MW is 39.2 kDa)



Western blot analysis using CALB2 mAb against HEK293 (1) and CALB2 (AA: 172-271)-hIgGFc transfected HEK293 (2) cell lysate.



Flow cytometric analysis of Hela cells using CALB2 mouse mAb (green) and negative control (red).



Flow cytometric analysis of A549 cells using CALB2 mouse mAb (green) and negative control (red).

#### **Mouse Monoclonal Antibody to CALB2 - References**

1.Hum Pathol. 2013 Dec;44(12):2743-50. ; 2.Int J Cancer. 2013 Nov;133(9):2077-88.;