10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Monoclonal Antibody to CALB2

Purified Mouse Monoclonal Antibody
Catalog # AO2402a

Specification

Mouse Monoclonal Antibody to CALB2 - Product Information

Application	**WB, FC, E**
Primary Accession	P22676
Reactivity	**Human, Monkey**
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. 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:2001709). 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 Cytomety
- Cell Culture

Mouse Monoclonal Antibody to CALB2 - Images

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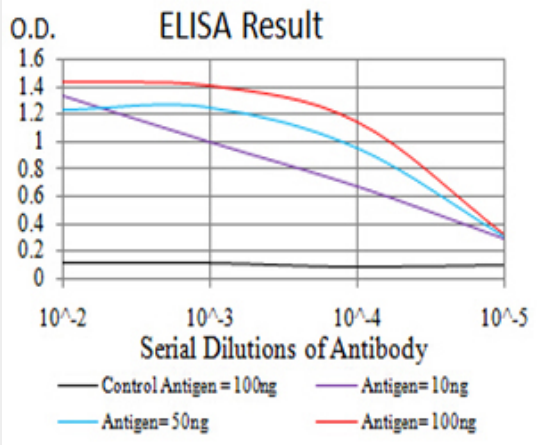
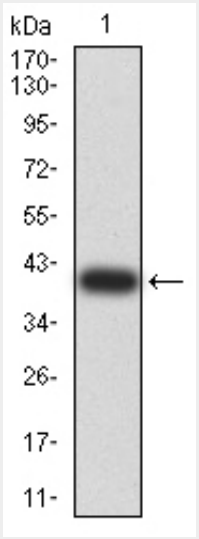
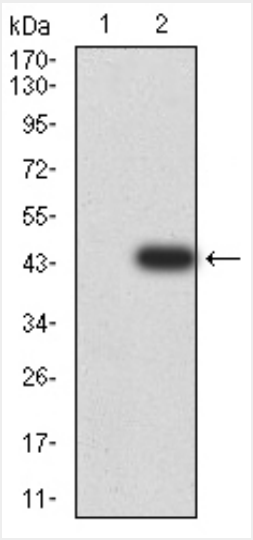


Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



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.

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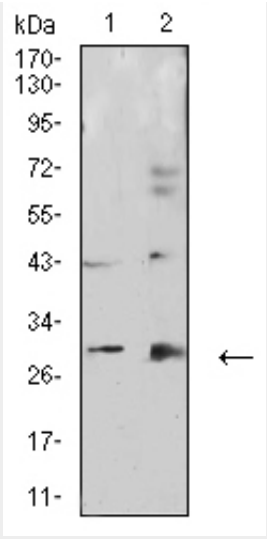
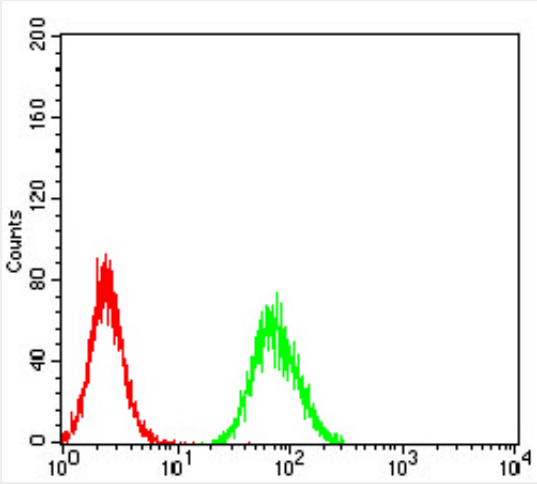


Western blot analysis using CALB2 mouse mAb against HepG2 (1) and COS7 (2) cell lysate.



Flow cytometric analysis of Hela 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.;