

Mouse Monoclonal Antibody to CALB2

Purified Mouse Monoclonal Antibody

Catalog # AO2402a

Product Information

Application	WB, FC, E
Primary Accession	P22676
Reactivity	Human, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	7H1G3
Isotype	Mouse IgG1
Calculated MW	31540
Description	<p>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. ;</p>
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

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.

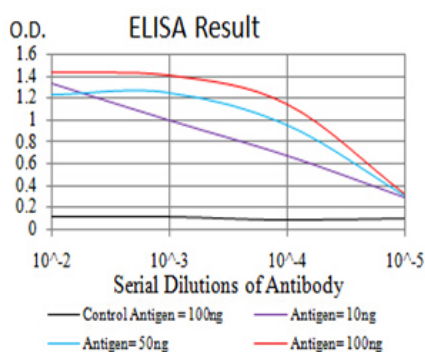
Protein Information

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 dendrites, 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.

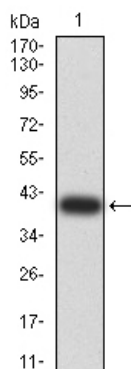
References

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

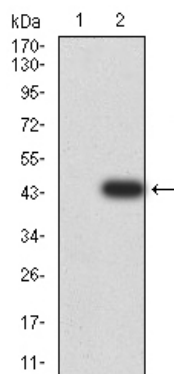
Images



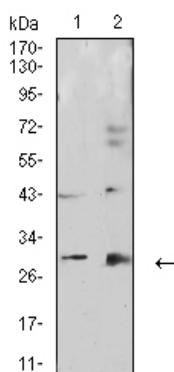
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



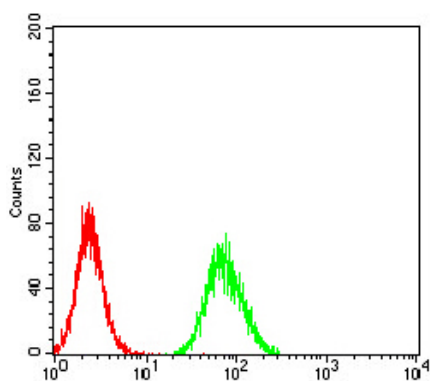
Western blot analysis using CALB2 mAb against human CALB2 (AA: 172-271) recombinant protein. (Expected MW is 39.2 kDa)



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



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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.