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

CALM1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8549b

Specification

CALM1 Antibody (C-term) - Product Information

Application	**WB, IF, IHC-P, FC,E**
Primary Accession	P0DP23
Other Accession	P05419, P62155, P62161, P62160, P62204, P62152, Q6PI52, P62149, Q16305, P62157, NP_008819, Q6YNX6, P0DP23, P0DP26, P0DP29, P0DP33, P0DP24, P0DP27, P0DP30, P0DP25, P0DP28, P0DP31, P0DP34, P0DP35
Reactivity	**Human**
Predicted	**Mouse, Rat, Xenopus, Bovine, C.Elegans, Chicken, Zebrafish, Drosophila, Rabbit, Sheep**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**107-132**

CALM1 Antibody (C-term) - Additional Information

Gene ID 801;805;808

Other Names
Calmodulin, CaM, CALM1, CALM, CAM, CAM1

Target/Specificity
This CALM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 107-132 amino acids from the C-terminal region of human CALM1.

Dilution
WB~~1:1000
IF~~1:10~50
IHC-P~~1:50~100
FC~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Precautions
CALM1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic

procedures.

CALM1 Antibody (C-term) - Protein Information

Name CALM1 {ECO:0000303|PubMed:7925473, ECO:0000312|HGNC:HGNC:1442}

Function Calmodulin acts as part of a calcium signal transduction pathway by mediating the control of a large number of enzymes, ion channels, aquaporins and other proteins through calcium-binding (PubMed:16760425, PubMed:23893133, PubMed:26969752, PubMed:27165696, PubMed:28890335, PubMed:31454269, PubMed:35568036). Calcium-binding is required for the activation of calmodulin (PubMed:16760425, PubMed:23893133, PubMed:26969752, PubMed:27165696, PubMed:28890335, PubMed:31454269, PubMed:35568036). Among the enzymes to be stimulated by the calmodulin-calcium complex are a number of protein kinases, such as myosin light-chain kinases and calmodulin-dependent protein kinase type II (CaMK2), and phosphatases (PubMed:16760425, PubMed:23893133, PubMed:26969752, PubMed:27165696, PubMed:28890335, PubMed:31454269, PubMed:35568036). Together with CCP110 and centrin, is involved in a genetic pathway that regulates the centrosome cycle and progression through cytokinesis (PubMed:16760425). Is a regulator of voltage- dependent L-type calcium channels (PubMed:31454269). Mediates calcium- dependent inactivation of CACNA1C (PubMed:26969752). Positively regulates calcium-activated potassium channel activity of KCNN2 (PubMed:27165696). Forms a potassium channel complex with KCNQ1 and regulates electrophysiological activity of the channel via calcium- binding (PubMed:25441029). Acts as a sensor to modulate the endoplasmic reticulum contacts with other organelles mediated by VMP1:ATP2A2 (PubMed:28890335).

Cellular Location
Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:P0DP26} Note=Distributed throughout the cell during interphase, but during mitosis becomes dramatically localized to the spindle poles and the spindle microtubules

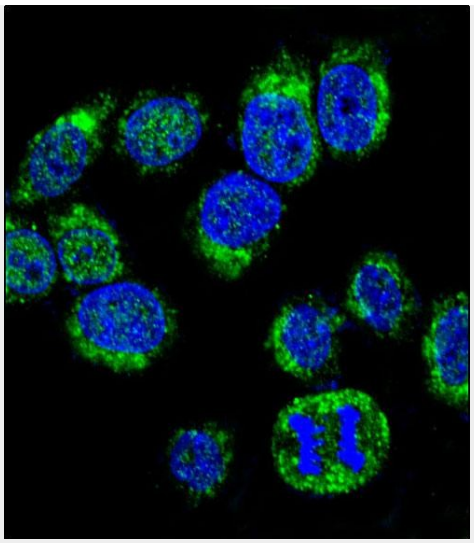
CALM1 Antibody (C-term) - Protocols

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

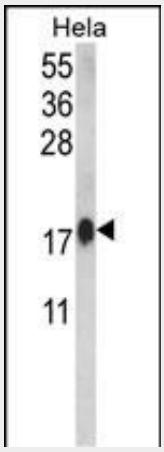
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CALM1 Antibody (C-term) - Images

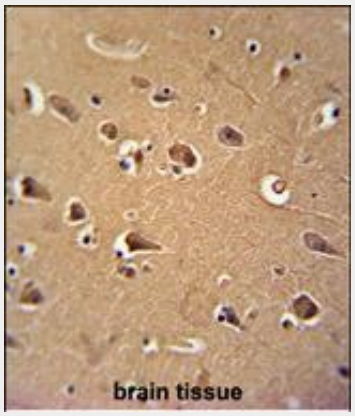
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Confocal immunofluorescent analysis of CALM1 Antibody (C-term)(Cat. #AP8549b) with Hela cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

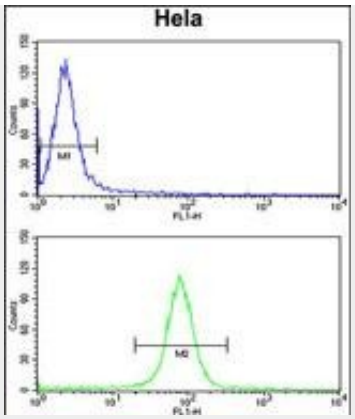


Western blot analysis of CALM1 Antibody (C-term) (Cat. #AP8549b) in Hela cell line lysates (35ug/lane). CALM1 (arrow) was detected using the purified Pab.(2ug/ml)



CALM1 Antibody (C-term) (Cat. #AP8549b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CALM1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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



CALM1 Antibody (C-term) (Cat.#AP8549b) flow cytometry analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CALM1 Antibody (C-term) - Background

CALM1 is a member of the EF-hand calcium-binding protein family.Calmodulin mediates the control of a large number of enzymes and other proteins by Ca(2+). Among the enzymes to be stimulated by the calmodulin-Ca(2+) complex are a number of protein kinases and phosphatases. Together with CEP110 and centrin, is involved in a genetic pathway that regulates the centrosome cycle and progression through cytokinesis.

CALM1 Antibody (C-term) - References

Zhao,D., et.al., Zhonghua Yi Xue Za Zhi 88 (35), 2452-2456 (2008)
Martins-de-Souza,D., et.al., J. Neural Transm. 116 (3), 275-289 (2009)