

# **CALM1 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8549b

# **Specification**

#### CALM1 Antibody (C-term) - Product Information

Application IF, WB, IHC-P,

FC,E

Primary Accession <u>PODP23</u>

Other Accession <u>P05419</u>, <u>P62155</u>,

P62161, P62160, P62204, P62152, Q6PI52, P62149, O16305, 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 Ig
Antigen Region 107-132

CALM1 Antibody (C-term) - Additional Information

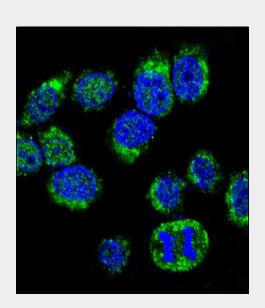
Gene ID 801;805;808

## **Other Names**

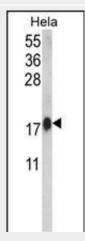
Calmodulin, CaM, CALM1, CALM, CAM, CAM1

## Target/Specificity

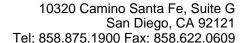
This CALM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 107-132 amino acids from the C-terminal region of human CALM1.



Confocal immunofluorescent analysis of CALM1 Antibody (C-term)(Cat. #AP8549b) with Hela cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (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)





#### **Dilution**

IF~~1:10~50 WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

#### **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

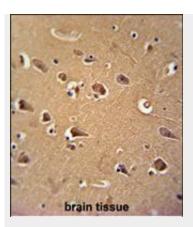
{ECO:0000303|PubMed:7925473, ECO:0000312|HGNC:HGNC:1442}

# **Function**

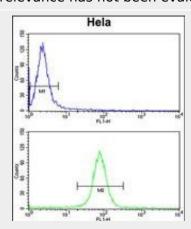
Calmodulin mediates the control of a large number of enzymes, ion channels, aquaporins and other proteins through calcium-binding. Among the enzymes to be stimulated by the calmodulin-calcium complex are a number of protein kinases and phosphatases. Together with CCP110 and centrin, is involved in a genetic pathway that regulates the centrosome cycle and progression through cytokinesis (PubMed:<a href="http://www.uniprot.org/citations/16760425"

target="\_blank">16760425</a>). Is a regulator of voltage-dependent L-type calcium channels (PubMed:<a href="http://www.uniprot.org/citations/31454269" target="\_blank">31454269</a>). Mediates calcium-dependent inactivation of CACNA1C (PubMed:<a href="http://www.uniprot.org/citations/26969752"

target="\_blank">26969752</a>).
Positively regulates calcium-activated potassium channel activity of KCNN2 (PubMed:<a href="http://www.uniprot.org/c itations/27165696"



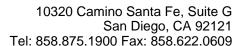
CALM1 Antibody (C-term) (Cat. #AP8549b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CALM1 Antibody (C-term) for immunohistochemistry. Clinical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



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





target="\_blank">27165696</a>). Forms a potassium channel complex with KCNQ1 and regulates electrophysiological activity of the channel via calcium-binding (PubMed:<a href="http://www.uniprot.org/c itations/25441029"

target="\_blank">25441029</a>). Acts as a sensor to modulate the endomplasmic reticulum contacts with other organelles mediated by VMP1:ATP2A2 (PubMed:<a hre f="http://www.uniprot.org/citations/28890335" target=" blank">28890335</a>).

#### **Cellular Location**

Cytoplasm, cytoskeleton, spindle.
Cytoplasm, cytoskeleton, spindle pole.
Cytoplasm, cytoskeleton, microtubule
organizing center, centrosome
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

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)