

**phospho-Calmodulin 1/2/3 (Ser102) Rabbit pAb**  
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Catalog # AP94215**Specification**

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**phospho-Calmodulin 1/2/3 (Ser102) Rabbit pAb - Product Information**

Application	IHC-P
Primary Accession	<a href="#">PODP23</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	16838

**phospho-Calmodulin 1/2/3 (Ser102) Rabbit pAb - Additional Information****Gene ID** 801;805;808**Other Names**

Calmodulin-1 {ECO:0000312|HGNC:HGNC:1442}, CALM1 {ECO:0000303|PubMed:7925473, ECO:0000312|HGNC:HGNC:1442}

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**phospho-Calmodulin 1/2/3 (Ser102) Rabbit pAb - 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](http://www.uniprot.org/citations/16760425), PubMed: [23893133](http://www.uniprot.org/citations/23893133), PubMed: [26969752](http://www.uniprot.org/citations/26969752), PubMed: [27165696](http://www.uniprot.org/citations/27165696), PubMed: [28890335](http://www.uniprot.org/citations/28890335), PubMed: [31454269](http://www.uniprot.org/citations/31454269), PubMed: [35568036](http://www.uniprot.org/citations/35568036)).

Calcium-binding is required for the activation of calmodulin (PubMed: [16760425](http://www.uniprot.org/citations/16760425), PubMed: [23893133](http://www.uniprot.org/citations/23893133), PubMed: [26969752](http://www.uniprot.org/citations/26969752), PubMed: [27165696](http://www.uniprot.org/citations/27165696), PubMed: [28890335](http://www.uniprot.org/citations/28890335), PubMed: [31454269](http://www.uniprot.org/citations/31454269), PubMed: [35568036](http://www.uniprot.org/citations/35568036)).

href="http://www.uniprot.org/citations/31454269" target="\_blank">31454269</a>, PubMed:<a href="http://www.uniprot.org/citations/35568036" target="\_blank">35568036</a>). 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:<a href="http://www.uniprot.org/citations/16760425" target="\_blank">16760425</a>, PubMed:<a href="http://www.uniprot.org/citations/23893133" target="\_blank">23893133</a>, PubMed:<a href="http://www.uniprot.org/citations/26969752" target="\_blank">26969752</a>, PubMed:<a href="http://www.uniprot.org/citations/27165696" target="\_blank">27165696</a>, PubMed:<a href="http://www.uniprot.org/citations/28890335" target="\_blank">28890335</a>, PubMed:<a href="http://www.uniprot.org/citations/31454269" target="\_blank">31454269</a>, PubMed:<a href="http://www.uniprot.org/citations/35568036" target="\_blank">35568036</a>). 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/citations/27165696" 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/citations/25441029" target="\_blank">25441029</a>). Acts as a sensor to modulate the endoplasmic reticulum contacts with other organelles mediated by VMP1:ATP2A2 (PubMed:<a href="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. 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

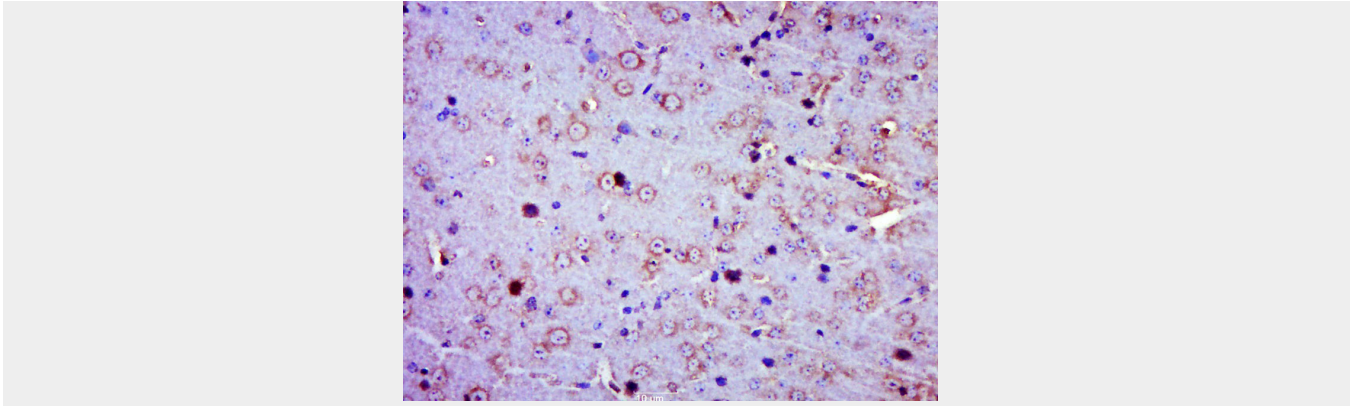
#### phospho-Calmodulin 1/2/3 (Ser102) Rabbit pAb - Protocols

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](#)

#### phospho-Calmodulin 1/2/3 (Ser102) Rabbit pAb - Images





Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-CaM I (Ser 102)) Polyclonal Antibody, Unconjugated (AP94215) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

**phospho-Calmodulin 1/2/3 (Ser102) Rabbit pAb - Background**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.