

# **CABP Polyclonal Antibody**

**Catalog # AP63625** 

### **Specification**

# **CABP Polyclonal Antibody - Product Information**

Application WB, IHC-P
Primary Accession Q9NZU7
Reactivity Rat, Mouse
Host Rabbit
Clonality Polyclonal

# **CABP Polyclonal Antibody - Additional Information**

#### **Gene ID 9478**

#### **Other Names**

Calcium-binding protein 1 (CaBP1) (Calbrain) (Caldendrin)

#### Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~ $\sim$ N/A

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

#### **Storage Conditions**

-20°C

### **CABP Polyclonal Antibody - Protein Information**

#### Name CABP1

## **Function**

Modulates calcium-dependent activity of inositol 1,4,5- triphosphate receptors (ITPRs) (PubMed:<a href="http://www.uniprot.org/citations/14570872" target="\_blank">14570872</a>). Inhibits agonist- induced intracellular calcium signaling (PubMed:<a

href="http://www.uniprot.org/citations/15980432" target="\_blank">15980432</a>). Enhances inactivation and does not support calcium-dependent facilitation of voltage-dependent P/Q-type calcium channels (PubMed:<a href="http://www.uniprot.org/citations/11865310"

target="\_blank">11865310</a>). Causes calcium-dependent facilitation and inhibits inactivation of L-type calcium channels by binding to the same sites as calmodulin in the C- terminal domain of CACNA1C, but has an opposite effect on channel function (PubMed:<a

href="http://www.uniprot.org/citations/15140941" target="\_blank">15140941</a>). Suppresses the calcium-dependent inactivation of CACNA1D (By similarity). Inhibits TRPC5 channels (PubMed:<a href="http://www.uniprot.org/citations/15895247" target="\_blank">15895247</a>). Prevents NMDA receptor-induced cellular degeneration. Required for the normal transfer of light signals through the retina (By similarity).



## **Cellular Location**

Cytoplasm, cytoskeleton. Cytoplasm, perinuclear region. Cell membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus Postsynaptic density. Note=L-CaBP1 is associated most likely with the cytoskeletal structures, whereas S-CaBP1 is localized at or near the plasma membrane. [Isoform S-CaBP1]: Cytoplasm, cell cortex. Cell membrane; Lipid-anchor Note=S-CaBP1 is localized at or near the plasma membrane

# **Tissue Location**

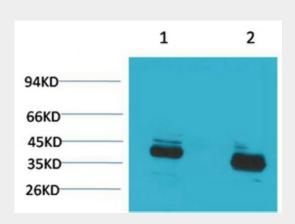
Retina and brain. Somatodendritic compartment of neurons. Calbrain was found exclusively in brain where it is abundant in the hippocampus, habenular area in the epithalamus and in the cerebellum

# **CABP Polyclonal Antibody - Protocols**

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

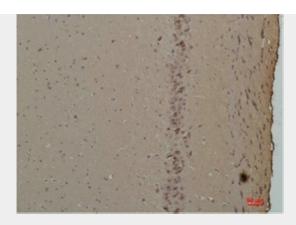
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **CABP Polyclonal Antibody - Images**



Western blot analysis of 1) Mouse Brain Tissue, 2) Rat Brain Tissue with CABP Rabbit pAb diluted at 1:2,000.





Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using CABP Rabbit pAb diluted at 1:200.

# **CABP Polyclonal Antibody - Background**

Modulates calcium-dependent activity of inositol 1,4,5- triphosphate receptors (ITPRs)(PubMed:14570872). Inhibits agonist- induced intracellular calcium signaling (PubMed:15980432). Enhances inactivation and does not support calcium-dependent facilitation of voltage-dependent P/Q-type calcium channels (PubMed:11865310). Causes calcium-dependent facilitation and inhibits inactivation of L-type calcium channels by binding to the same sites as calmodulin in the C-terminal domain of CACNA1C, but has an opposite effect on channel function (PubMed:15140941). Suppresses the calcium-dependent inactivation of CACNA1D (By similarity). Inhibits TRPC5 channels (PubMed:15895247). Prevents NMDA receptor-induced cellular degeneration. Required for the normal transfer of light signals through the retina (By similarity).