

CABP1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7588b

Specification

CABP1 Antibody (C-term) - Product Information

Application WB, IHC-P,E
Primary Accession Q9NZU7

Other Accession
Reactivity
O88751, Q9JLK7, Q9N1R0
Human, Mouse, Rat

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 311-343

CABP1 Antibody (C-term) - Additional Information

Gene ID 9478

Other Names

Calcium-binding protein 1, CaBP1, Calbrain, Caldendrin, CABP1

Target/Specificity

This CABP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 311-343 amino acids from the C-terminal region of human CABP1.

Dilution

WB~~1:2000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

CABP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CABP1 Antibody (C-term) - Protein Information

Name CABP1

Function 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).

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

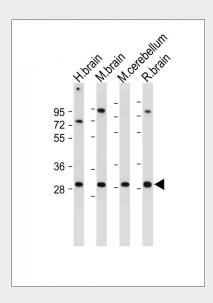
Retina and brain. Somatodendritic compartment of neurons. Calbrain was found exclusively in brain where it is abundant in the hippocampus, habenular area in the epithalamus and in the cerebellum

CABP1 Antibody (C-term) - Protocols

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

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

CABP1 Antibody (C-term) - Images



All lanes: Anti-CABP1 Antibody (C-term) at 1:2000 dilution Lane 1: Human brain lysate Lane 2:



Mouse brain lysate Lane 3: Mouse cerebellum lysate Lane 4: Rat brain lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain tissue reacted with CABP1 antibody (C-term) (Cat.#AP7588b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CABP1 Antibody (C-term) - Background

CABP1 belongs to a subfamily of calcium binding proteins, which share similarity to calmodulin. Calcium binding proteins are an important component of calcium mediated cellular signal transduction. Expression of this protein was only detected in retina and brain. Study of the mouse homolog demonstrated that groups of cells expressing this protein are located in the center or inner border of the inner unclear layer of retina.

CABP1 Antibody (C-term) - References

Haynes, L.P., Proteomics 6 (6), 1822-1832 (2006) Wingard, J.N., J. Biol. Chem. 280 (45), 37461-37470 (2005) Zhou, H., J. Biol. Chem. 280 (33), 29612-29619 (2005) Haeseleer, F., J. Biol. Chem. 275 (2), 1247-1260 (2000)