

CABP1 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP11095c

Specification

CABP1 Antibody (Center) Blocking peptide - Product Information

Primary Accession

Q9NZU7

CABP1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 9478

Other Names

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CABP1 Antibody (Center) Blocking peptide - 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:<a

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

target="_blank">11865310). 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 (Center) Blocking peptide - Protocols

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

• Blocking Peptides

CABP1 Antibody (Center) Blocking peptide - Images

CABP1 Antibody (Center) Blocking peptide - Background

The product of this gene belongs to a subfamily of calciumbinding proteins, which share similarity to calmodulin. Calciumbinding proteins are an important component of calcium mediatedcellular signal transduction. Expression of this gene was onlydetected in retina and brain. Study of the mouse homologdemonstrated that groups of cells expressing this protein arelocated in the center or inner border of the inner unclear layer of of retina. Three alternatively spliced variants encoding differentisoforms have been described.

CABP1 Antibody (Center) Blocking peptide - References

Li, C., et al. J. Biol. Chem. 284(4):2472-2481(2009)Chen, M.L., et al. J. Biomed. Sci. 15(2):169-181(2008)Haynes, L.P., et al. Proteomics 6(6):1822-1832(2006)Wingard, J.N., et al. J. Biol. Chem. 280(45):37461-37470(2005)Zhou, H., et al. J. Biol. Chem. 280(33):29612-29619(2005)