

CABP1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP7588b**Specification**

CABP1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9NZU7](#)**CABP1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 9478**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7588b](/products/AP7588b) was selected from the C-term region of human CABP1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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 (C-term) Blocking Peptide - Protein Information**Name** CABP1**Function**

Modulates calcium-dependent activity of inositol 1,4,5- triphosphate receptors (ITPRs)(PubMed:[14570872](http://www.uniprot.org/citations/14570872)). Inhibits agonist- induced intracellular calcium signaling (PubMed:[15980432](http://www.uniprot.org/citations/15980432)). Enhances inactivation and does not support calcium-dependent facilitation of voltage-dependent P/Q-type calcium channels (PubMed:[11865310](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/15140941)). Suppresses the calcium-dependent inactivation of CACNA1D (By similarity). Inhibits TRPC5 channels (PubMed:[15895247](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CABP1 Antibody (C-term) Blocking Peptide - Images**CABP1 Antibody (C-term) Blocking Peptide - 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 nuclear layer of retina.

CABP1 Antibody (C-term) Blocking Peptide - 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)