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CABP1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7588b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9NZU7
Other Accession	O88751, Q9JLK7, Q9N1R0
Reactivity	Human, Mouse, Rat
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15262
Calculated MW	39838
Antigen Region	311-343

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~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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.

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

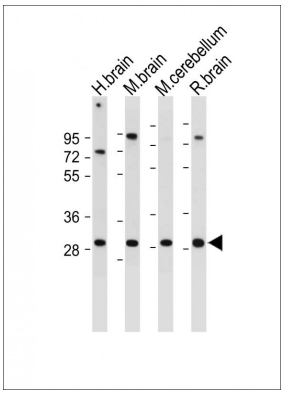
Background

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.

References

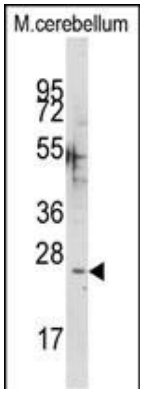
Haynes,L.P., Proteomics 6 (6), 1822-1832 (2006) Wingard,J.N., J. Biol. Chem. 280 (45), 37461-37470 (2005) Zhou,H., J. Biol. Chem. 280 (33), 29612-29619 (2005) Haeseleer,F., J. Biol. Chem. 275 (2), 1247-1260 (2000)

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 µg 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.

Western blot analysis of anti-CABP1 Antibody (C-term) (Cat.#AP7588b) in mouse cerebellum tissue lysates (35ug/lane).CABP1(arrow) was detected using the purified Pab.





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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.