

CABP Polyclonal Antibody

Catalog # AP63625

Product Information

NB, IHC-P
<u> 29NZU7</u>
Rat, Mouse
Rabbit
Polyclonal
39838

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~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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

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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

Modulates calcium-dependent activity of inositol 1,4,5- triphosphate receptors (ITPRs)(PubMed: <u>14570872</u>). Inhibits agonist- induced intracellular calcium signaling (PubMed:<u>15980432</u>). Enhances inactivation and does not support calcium-dependent facilitation of voltage-dependent P/Q-type calcium channels (PubMed:<u>11865310</u>). 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:<u>15140941</u>). Suppresses the calcium-dependent inactivation of CACNA1D (By similarity). Inhibits TRPC5 channels (PubMed:<u>15895247</u>). Prevents NMDA receptor-induced cellular degeneration. Required for the normal transfer of light signals through the retina (By similarity).

Images



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