

CaBP8 Antibody

Catalog # ASC11174

Product Information

Application	WB, E
Primary Accession	Q9BXU9
Other Accession	NP_113656 , 157743275
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	29324
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CaBP8 antibody can be used for detection of CaBP8 by Western blot at 1 - 2 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	83698
Other Names	Calcium-binding protein 8, CaBP8, Calneuron I, Calneuron-1, CALN1, CABP8
Target/Specificity	CALN1;
Reconstitution & Storage	CaBP8 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	CaBP8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CALN1
Synonyms	CABP8
Function	Negatively regulates Golgi-to-plasma membrane trafficking by interacting with PI4KB and inhibiting its activity. May play a role in the physiology of neurons and is potentially important in memory and learning.
Cellular Location	Golgi apparatus, trans-Golgi network membrane; Single-pass type IV membrane protein. Cytoplasm, perinuclear region. Cell membrane; Single-pass type IV membrane protein
Tissue Location	Brain specific..

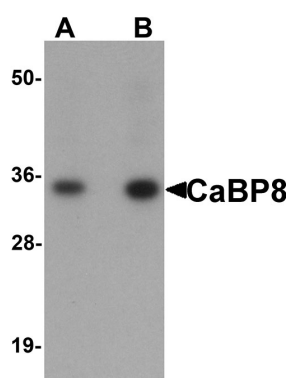
Background

CaBP8 Antibody: Calcium binding proteins (CaBP) play a crucial role in the calcium-mediated cellular signal transduction pathway in the central nervous system. The CaBP family shares much similarity with CaM I (calmodulin), and it has been shown that CaBP proteins can substitute functionally for, and possibly augment the function of, CaM I. CaBP8, contains two EF-hand domains for calcium binding and shares 70% homology with CaBP7 and 50% homology with CaM I. It negatively regulates Golgi-to-plasma membrane trafficking by interacting with PI4KB and inhibiting its activity. Both CaBP8 and CaBP7 possess a targeting mechanism that is unique amongst the CaBPs that may contribute to differential functional Ca²⁺-sensing by these family members.

References

Sokal I, Li N, Verlinde CL, et al. Ca²⁺-binding proteins in the retina: from discovery to etiology of human disease. *Biochim. Biophys. Acta.*2000; 1498: 233-51.
Haeseleer F, Imanishi Y, Sokal I, et al. Calcium-binding proteins: intracellular sensors from the calmodulin superfamily. *Biochem. Biophys. Res. Commun.*2002; 290:615-23.
Ikura M, Osawa M, and Ames JB. The role of calcium-binding proteins in the control of transcription: structure to function. *Bioessays*2002; 24:625-36.
McCue HV, Burgoyne RD, Haynes LP. Membrane targeting of the EF-hand containing calcium-sensing proteins CaBP7 and CaBP8. *Biochem. Biophys. Res. Commun.*2009; 380:825-31.

Images



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