

CaBP7 Antibody

Catalog # ASC11173

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q86V35
Other Accession	NP_872333 , 32698884
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	24453
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CaBP7 antibody can be used for detection of CaBP7 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunocytochemistry starting at 4 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	164633
Other Names	Calcium-binding protein 7, CaBP7, Calneuron II, Calneuron-2, CABP7, CALN2
Target/Specificity	CABP7;
Reconstitution & Storage	CaBP7 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	CaBP7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CABP7
Synonyms	CALN2
Function	Negatively regulates Golgi-to-plasma membrane trafficking by interacting with PI4KB and inhibiting its activity.
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

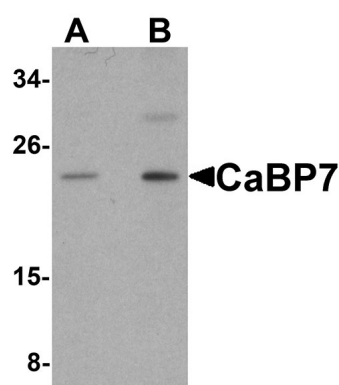
Background

CaBP7 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. CaBP7 (Calcium-binding protein 7), contains two EF-hand domains for calcium binding and shares 70% homology with CaBP8 and 50% homology with CaM I. It negatively regulates Golgi-to-plasma membrane trafficking by interacting with PI4KB and inhibiting its activity. CaBP7 and 8 possess a targeting mechanism that is unique amongst the CaBPs that may contribute to differential functional Ca²⁺-sensing by these family members.

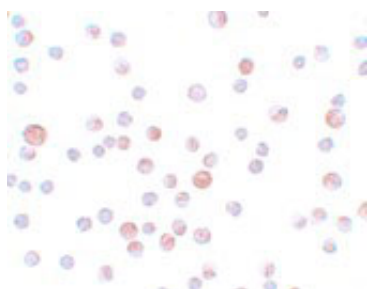
References

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.

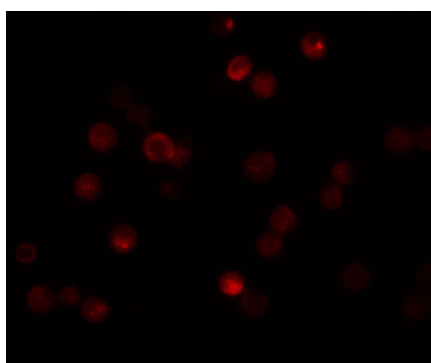
Images



Western blot analysis of CaBP7 in HeLa cell lysate with CaBP7 antibody at (A) 1 and (B) 2 μ g/mL.



Immunocytochemistry of CaBP7 in HeLa cells with CaBP7 antibody at 4 μ g/mL.



Immunofluorescence of CaBP7 in HeLa cells with CaBP7 antibody at 20 μ g/mL.

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