

### CaBP7 Antibody

Catalog # ASC11173

## **Specification**

## **CaBP7 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

**Application Notes** 

WB, ICC, IF 086V35

NP\_872333, 32698884 Human, Mouse, Rat

Rabbit Polyclonal

IqG

CaBP7 antibody can be used for detection of CaBP7 by Western blot at  $1 - 2 \mu g/mL$ .

Antibody can also be used for

immunocytochemistry starting at 4  $\mu$ g/mL. For immunofluorescence start at 20  $\mu$ g/mL.

## **CaBP7 Antibody - Additional Information**

Gene ID 164633

**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.

#### **CaBP7 Antibody - 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

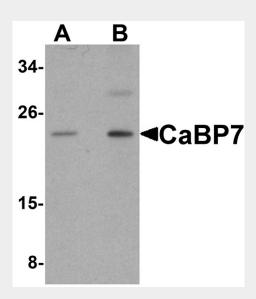


## **CaBP7 Antibody - Protocols**

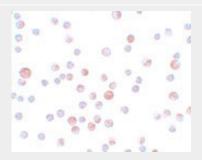
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## CaBP7 Antibody - Images

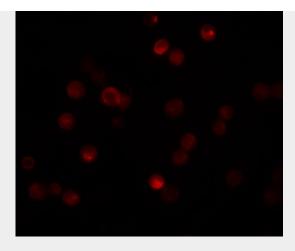


Western blot analysis of CaBP7 in Hela cell lysate with CaBP7 antibody at (A) 1 and (B) 2 μg/mL.



Immunocytochemistry of CaBP7 in HeLa cells with CaBP7 antibody at 4  $\mu$ g/mL.





Immunofluorescence of CABP7 in HeLa cells with CAPB7 antibody at 20  $\mu g/mL$ .

# CaBP7 Antibody - 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.

#### **CaBP7 Antibody - 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. Bioessays2002; 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.