

FRMPD1 Antibody

Catalog # ASC11002

Specification

FRMPD1 Antibody - Product Information

Application WB, IF
Primary Accession Q5SYB0
Other Accession NP 055722, 239582741

Reactivity
Host
Clonality
Polyclonal
Isotype
Human
Rabbit
Polyclonal

Application Notes FRMPD1 antibody can be used for

detection of FRMPD1 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunoflourescence starting at 20 μ g/mL. For immunofluorescence start at 5 μ g/mL.

FRMPD1 Antibody - Additional Information

Gene ID 22844

Target/Specificity

FRMPD1;

Reconstitution & Storage

FRMPD1 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

FRMPD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FRMPD1 Antibody - Protein Information

Name FRMPD1

Synonyms FRMD2, KIAA0967

Function

Stabilizes membrane-bound GPSM1, and thereby promotes its interaction with GNAI1.

Cellular Location

Cytoplasm, cytosol. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Found both in the cytoplasm and associated with the cell membrane.

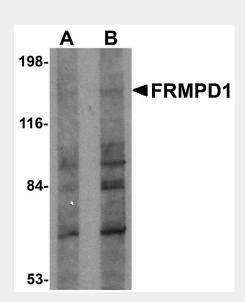
FRMPD1 Antibody - Protocols



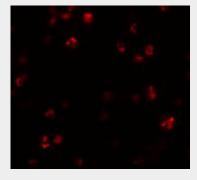
Provided below are standard protocols that you may find useful for product applications.

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

FRMPD1 Antibody - Images



Western blot analysis of FRMPD1 in K562 cell lysate with FRMPD1 antibody at (A) 1 and (B) 2 $\mu g/mL$.



Immunofluorescence of FRMPD1 in K562 cells with FRMPD1 antibody at 20 μg/mL.

FRMPD1 Antibody - Background

FRMPD1 Antibody: The FERM and PDZ domain containing (FRMPD) protein family consists of four proteins that contain a FERM (Four-point-one, erzin, radixin, moesin) domain and at least one PDZ (PSD-95/Discs large/Zonula-occuldens-1) domain. FRMPD1 was initially identified through a yeast two-hybrid screening with Activator of G-protein signaling 3 (AGS3), a protein that acts to stabilize the GDP-bound conformation of Gai, as the bait. FRMPD1 binds to the tetratricopeptide repeat of AGS3 and stabilizes AGS3 in a membrane environment. Suppression of FRMPD1 in Cath.a-differentiated neuronal cells decreased the level of endogenous AGS3 in membrane fractions by ~50% and enhanced the inhibition of forskolin-induced increases in cAMP.



Tel: 858.875.1900 Fax: 858.875.1999



Co-immunoprecipitation studies indicate that the interaction of AGS3 with FRMPD1 is mutually exclusive with the interaction of AGS3 with Gai3, suggesting that FRMPD1 may position AGS3 in the membrane where it can then interact with Galphai.

FRMPD1 Antibody - References

An N, Blumer JB, Bernard ML. The PDZ and Band 4.1 containing protein Frmpd1 regulates the subcellular location of activator of G-protein signaling 3 and its interaction with G-proteins. J. Biol. Chem.2008: 283:24718-28.

Stenzel N, Fetzer CP, Heumann R, et al. PDZ-domain-directed basolateral targeting of the peripheral membrane protein FRMPD2 in epithelial cells. J. Cell Sci.2009; 122:3374-84.

Lee HW, Choi J, Shin H, et al. Preso, a novel PSD-95-interacting FERM and PDZ domain protein that regulates dendritic spine morphogenesis. J. Neurosci. 2008; 28:14546-56.