

FRMPD1 Antibody

Catalog # ASC11002

Product Information

Application	WB, IF, E
Primary Accession	Q5SYB0
Other Accession	NP_055722 , 239582741
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	173437
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
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 immunofluorescence starting at 20 μ g/mL. For immunofluorescence start at 5 μ g/mL.

Additional Information

Gene ID	22844
Other Names	FERM and PDZ domain-containing protein 1, FERM domain-containing protein 2, FRMPD1, FRMD2, KIAA0967
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.

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.

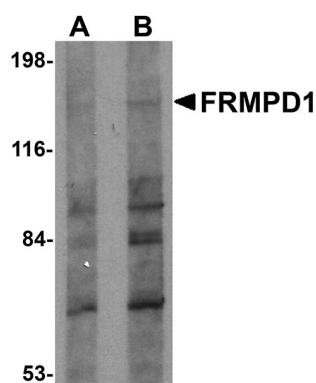
Background

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-occludens-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. 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.

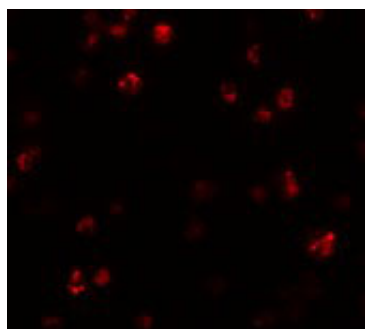
References

- 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, Fetzter 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.

Images



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



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

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