10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FRMPD2 Antibody
Catalog # ASC11003

Specification

FRMPD2 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q68DX3
Other Accession	NP_001018081, 281604114
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**FRMPD2 antibody can be used for detection of FRMPD2 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.**

FRMPD2 Antibody - Additional Information

Gene ID	**143162**

Target/Specificity
FRMPD2;

Reconstitution & Storage
FRMPD2 antibody can be stored at 4℃ for three months and -20℃, 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
FRMPD2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FRMPD2 Antibody - Protein Information

Name FRMPD2

Synonyms PDZD5C, PDZK4, PDZK5C

Function
May play a role in the regulation of tight junction formation. Binds phosphatidylinositol 3,4-bisphosphate (PtdIns(3,4)P2).

Cellular Location
Cytoplasm. Basolateral cell membrane. Cell junction, tight junction. Note=Colocalizes with CTNNB1, CDH1 and PKP4 at the basolateral membrane. Colocalizes with TJP1 at tight junctions. Its recruitment to cell-cell contacts requires CDH1

Tissue Location
Expressed in epithelial cells.

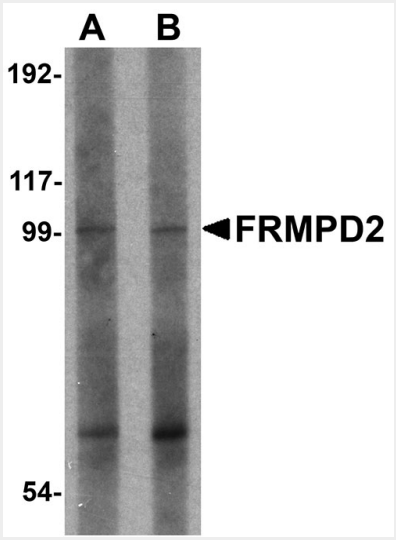
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FRMPD2 Antibody - Protocols

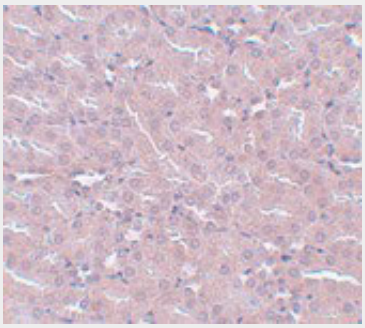
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FRMPD2 Antibody - Images



Western blot analysis of FRMPD2 in rat kidney tissue lysate with FRMPD2 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of FRMPD2 in mouse kidney tissue with FRMPD2 antibody at 5 µg/mL.

FRMPD2 Antibody - Background

FRMPD2 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. FRMPD2 also contains an N-terminal KIND domain and three PDZ domains and is structurally similar to the protein tyrosine phosphatase PTP-BL. FRMPD2 is localized in a polarized fashion in epithelial cells at the basolateral membrane and

partially co-localizes with the tight-junction marker protein Zonula-occuldens-1. Suppression of FRMPD2 expression via RNAi in Caco-2 cells results in an impairment of tight junction formation, indicating that FRMPD2 plays a major role in tight junction formation. Other experiments indicate that FRMPD2 is a binding partner to several catenin family members and recruitment of FRMPD2 to cell-cell contacts is dependent on E-cadherin-mediated cell-cell adhesion.

FRMPD2 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.
Erdmann KS. The protein tyrosine phosphatase PTP-Basophil/Basophil-like. Interacting proteins and molecular functions. Eur. J. Biochem.270:4789-98.