

FRMPD2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59115

Specification

FRMPD2 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q68DX3
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	144 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PDZK4
Epitope Specificity	1001-1100/1309
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm (Potential). 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.
SIMILARITY	Contains 1 FERM domain. Contains 1 KIND domain. Contains 3 PDZ (DHR) domains.
SUBUNIT	Interacts (via the PDZ 2 domain) with CTNND2 (via the extreme C-terminus). Interacts (via the PDZ 2 domain) with PKP4 (via the extreme C-terminus); this interaction directed FRMPD2 to the basolateral membranes. Interacts (via the PDZ 2 domain) with ARVCF (via the extreme C-terminus).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

This gene encodes a peripheral membrane protein and is located in a region of chromosome 10q that contains a segmental duplication. This copy of the gene is full-length and is in the telomeric duplicated region. Two other more centromerically proximal copies of the gene are partial and may represent pseudogenes. This full-length gene appears to function in the establishment and maintenance of cell polarization. The protein is recruited to cell-cell junctions in an E-cadherin-dependent manner, and is selectively localized at the basolateral membrane in polarized epithelial cells. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2009]

FRMPD2 Polyclonal Antibody - Additional Information

Gene ID 143162

Other Names

FERM and PDZ domain-containing protein 2, PDZ domain-containing protein 4, PDZ domain-containing protein 5C, FRMPD2, PDZD5C, PDZK4, PDZK5C

Target/Specificity

Expressed in epithelial cells.

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

FRMPD2 Polyclonal Antibody - Protein Information

Name FRMPD2

Synonyms PDZD5C, PDZK4, PDZK5C

Function

Functions as a scaffold protein and likely plays a role in N- methyl-D-aspartic acid receptor (NMDAR)-mediated synaptic excitatory transmission (By similarity). May be involved in synapse formation in cone photoreceptor cells (By similarity). May play a role in the regulation of tight junction formation (PubMed:19706687). Binds phosphatidylinositol 3,4-bisphosphate (PtdIns(3,4)P2) (PubMed:19706687). May play a role in the regulation of NOD2-mediated NF-kappa-B activation in immune response (PubMed:23213202).

Cellular Location

Cytoplasm. Basolateral cell membrane Cell junction, tight junction Postsynaptic density {ECO:0000250|UniProtKB:A0A140LI67} 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. Colocalizes with NOD2 to the basolateral membrane in intestinal epithelial cells (PubMed:23213202)

Tissue Location

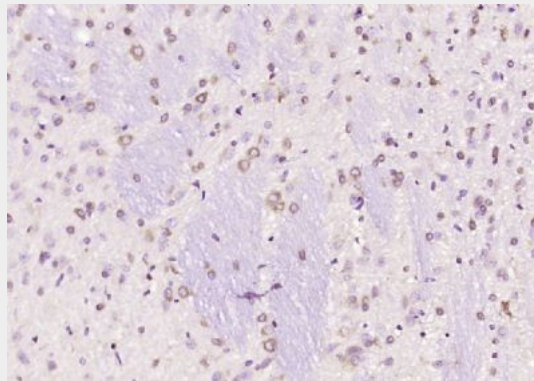
Expressed in epithelial cells.

FRMPD2 Polyclonal Antibody - Protocols

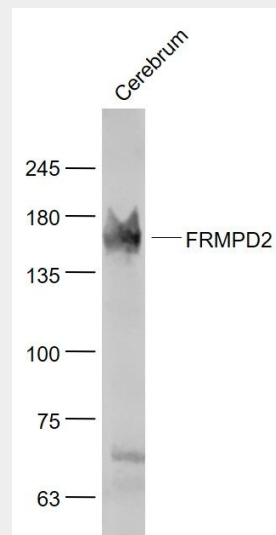
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FRMPD2 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FRMPD2) Polyclonal Antibody, Unconjugated (bs-9038R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Sample:

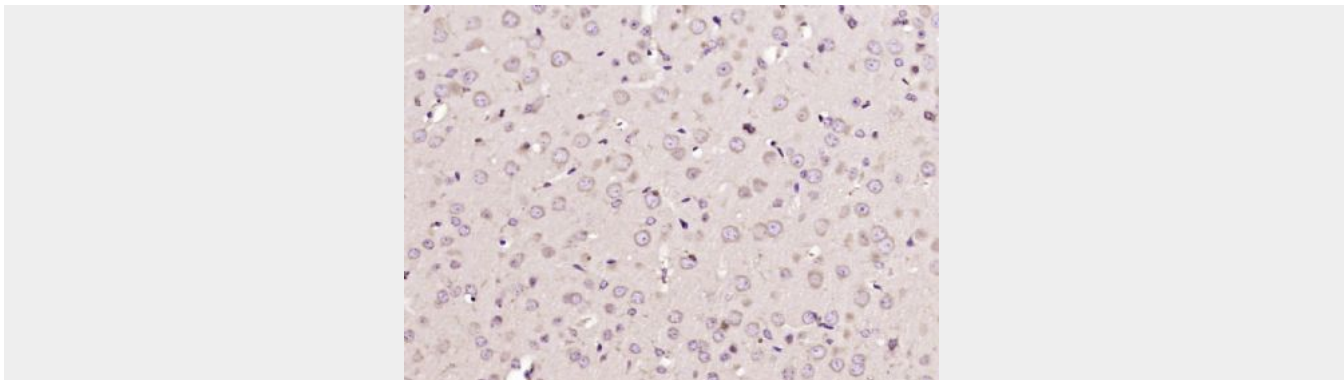
Cerebrum (Mouse) Lysate at 40 ug

Primary: Anti- FRMPD2 (bs-9038R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 144 kD

Observed band size: 144 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FRMPD2) Polyclonal Antibody, Unconjugated (bs-9038R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.