

FRMPD2 (K-15): sc-138286

BACKGROUND

FERM domains are roughly 150 amino acids in length and are found in a number of cytoskeletal-associated proteins such as ezrin, radixin, moesin and 4.1 (erythrocyte membrane protein band 4.1), where they provide a link between cytoskeletal signals and membrane dynamics. FRMPD2 (FERM and PDZ domain-containing protein 2), also known as PDZD5C (PDZ domain-containing protein 5C) or PDZK4 (PDZ domain-containing protein 4), is a 1,309 amino acid protein containing one FERM domain, a KIND domain, and 3 PDZ (DHR) domains. Localizing to cytoplasm and basolateral cell membrane, FRMPD2 is expressed in epithelial cells and may play a role in the regulation of tight junction formation. FRMPD2 exists as five alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 10q11.22.

REFERENCES

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2. Deloukas, P., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. *Nature* 429: 375-381.
3. Grupe, A., et al. 2006. A scan of chromosome 10 identifies a novel locus showing strong association with late-onset Alzheimer disease. *Am. J. Hum. Genet.* 78: 78-88.
4. Lamesch, P., et al. 2007. hORFeome v3.1: a resource of human open reading frames representing over 10,000 human genes. *Genomics* 89: 307-315.
5. Stenzel, N., et al. 2009. PDZ-domain-directed basolateral targeting of the peripheral membrane protein FRMPD2 in epithelial cells. *J. Cell Sci.* 122: 3374-3384.
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CHROMOSOMAL LOCATION

Genetic locus: FRMPD2 (human) mapping to 10q11.22; Gm626 (mouse) mapping to 14 B.

SOURCE

FRMPD2 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of FRMPD2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138286 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

FRMPD2 (K-15) is recommended for detection of FRMPD2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with FRMPD2L1 and FRMPD2L2 of human origin.

Suitable for use as control antibody for FRMPD2 siRNA (h): sc-90419, FRMPD2 siRNA (m): sc-145246, FRMPD2 shRNA Plasmid (h): sc-90419-SH, FRMPD2 shRNA Plasmid (m): sc-145246-SH, FRMPD2 shRNA (h) Lentiviral Particles: sc-90419-V and FRMPD2 shRNA (m) Lentiviral Particles: sc-145246-V.

Molecular Weight of FRMPD2 isoform 1: 144 kDa.

Molecular Weight of FRMPD2 isoform 2: 141 kDa.

Molecular Weight of FRMPD2 isoform 4: 35 kDa.

Molecular Weight of FRMPD2 isoform 5: 29 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.