

FRMPD3 (S-20): sc-246967

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. FRMPD3 (FERM and PDZ domain-containing protein 3), also known as KIAA1817, is a 1,810 amino acid protein containing one FERM domain and a PDZ (DHR) domain. The gene encoding FRMPD3 maps to human chromosome Xq22.3. Chromosome X consists of approximately 153 million base pairs and nearly 1,000 genes. There are a number of conditions related to an unusual number and combination of sex chromosomes being inherited, including Turner's syndrome, Klinefelter's syndrome and Triple X syndrome. Color blindness, hemophilia, and Duchenne muscular dystrophy are well-known X chromosome-linked conditions that affect males more frequently as males carry a single X chromosome.

REFERENCES

1. Cramer, E.M. and Breton-Gorius, J. 1987. Ultrastructural localization of lysozyme in human neutrophils by immunogold. *J. Leukoc. Biol.* 41: 242-247.
2. Nagase, T., et al. 2001. Prediction of the coding sequences of unidentified human genes. XX. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 8: 85-95.
3. Zhang, K., et al. 2005. Molecular cloning and characterization of three novel lysozyme-like genes, predominantly expressed in the male reproductive system of humans, belonging to the c-type lysozyme/ α -lactalbumin family. *Biol. Reprod.* 73: 1064-1071.
4. Ross, M.T., et al. 2005. The DNA sequence of the human X chromosome. *Nature* 434: 325-337.
5. Augui, S., et al. 2007. Sensing X chromosome pairs before X inactivation via a novel X-pairing region of the Xic. *Science* 318: 1632-1636.
6. Cocquet, J., et al. 2009. The multicopy gene Sly represses the sex chromosomes in the male mouse germline after meiosis. *PLoS Biol.* 7: e1000244.

CHROMOSOMAL LOCATION

Genetic locus: FRMPD3 (human) mapping to Xq22.3.

SOURCE

FRMPD3 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FRMPD3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-246967 P, (100 μ g 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

FRMPD3 (S-20) is recommended for detection of FRMPD3 of 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); non cross-reactive with FRMPD1, FRMPD2 or FRMPD4.

FRMPD3 (S-20) is also recommended for detection of FRMPD3 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for FRMPD3 siRNA (h): sc-90860, FRMPD3 shRNA Plasmid (h): sc-90860-SH and FRMPD3 shRNA (h) Lentiviral Particles: sc-90860-V.

Molecular Weight of FRMPD3: 199 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.