SANTA CRUZ BIOTECHNOLOGY, INC.

FRMD8 (S-15): sc-138945

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The Power to Question

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. FRMD8 (FERM domain-containing protein 8), also known as FKSG44, is a 464 amino acid protein containing one FERM domain. Existing as two alternatively spliced isoforms, the gene encoding FRMD8 maps to human chromosome 11q13.1. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

REFERENCES

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3. Loussouarn, G., et al. 2006. KCNQ1 K^+ channel-mediated cardiac channelopathies. Methods Mol. Biol. 337: 167-183.
4. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. Nature 440: 497-500.
5. Ataga, K.I., et al. 2007. β-thalassaemia and sickle cell anaemia as paradigms of hypercoagulability. Br. J. Haematol. 139: 3-13.
6. Berger, A.C., et al. 2007. The subcellular localization of the Niemann-Pick Type C proteins depends on the adaptor complex AP-3. J. Cell Sci. 120: 3640-3652.
7. Lee, J.H. and Paull, T.T. 2007. Activation and regulation of ATM kinase activity in response to DNA double-strand breaks. Oncogene 26: 7741-7748.
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CHROMOSOMAL LOCATION

Genetic locus: FRMD8 (human) mapping to 11q13.1; Frmd8 (mouse) mapping to 19 A.

SOURCE

FRMD8 (S-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of FRMD8 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138945 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FRMD8 (S-15) is recommended for detection of FRMD8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other FRMD family members.

FRMD8 (S-15) is also recommended for detection of FRMD8 in additional species, including canine, bovine and porcine.

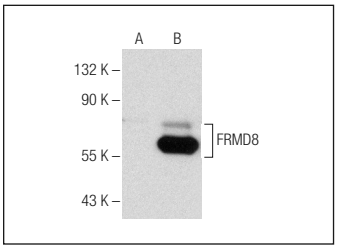
Suitable for use as control antibody for FRMD8 siRNA (h): sc-96500, FRMD8 siRNA (m): sc-145244, FRMD8 shRNA Plasmid (h): sc-96500-SH, FRMD8 shRNA Plasmid (m): sc-145244-SH, FRMD8 shRNA (h) Lentiviral Particles: sc-96500-V and FRMD8 shRNA (m) Lentiviral Particles: sc-145244-V.

Molecular Weight of FRMD8 isoform 1: 51 kDa.

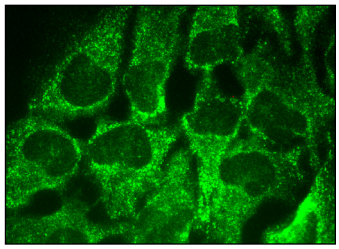
Molecular Weight of FRMD8 isoform 2: 45 kDa.

Positive Controls: FRMD8 (m): 293T Lysate: sc-120324.

DATA



FRMD8 (S-15): sc-138945. Western blot analysis of FRMD8 expression in non-transfected: sc-117752 (**A**) and mouse FRMD8 transfected: sc-120324 (**B**) 293T whole cell lysates.



FRMD8 (S-15): sc-138945. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

STORAGE

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

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.