

FRMD8 (E-11): sc-514186

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

1. Grossfeld, P.D., et al. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. *Am. J. Med. Genet. A* 129A: 51-61.
2. Zehelein, J., et al. 2006. Skipping of Exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. *J. Biol. Chem.* 281: 35397-35403.
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.

CHROMOSOMAL LOCATION

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

SOURCE

FRMD8 (E-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 5-24 at the N-terminus of FRMD8 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FRMD8 (E-11) is available conjugated to agarose (sc-514186 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514186 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514186 PE), fluorescein (sc-514186 FITC), Alexa Fluor[®] 488 (sc-514186 AF488), Alexa Fluor[®] 546 (sc-514186 AF546), Alexa Fluor[®] 594 (sc-514186 AF594) or Alexa Fluor[®] 647 (sc-514186 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514186 AF680) or Alexa Fluor[®] 790 (sc-514186 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514186 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

FRMD8 (E-11) is recommended for detection of FRMD8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

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.

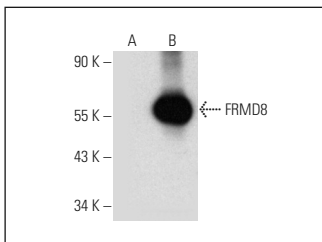
Molecular Weight of FRMD8 isoform 2: 45 kDa.

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

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



FRMD8 (E-11): sc-514186. Western blot analysis of FRMD8 expression in non-transfected: sc-117752 (A) and mouse FRMD8 transfected: sc-120324 (B) 293T whole cell lysates.

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 for detailed protocols and support products.