

# FRMD5 (D-8): sc-514867

## 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. FRMD5 (FERM domain-containing protein 5) is a 570 amino acid single-pass membrane protein that contains one FERM domain and exists as two alternatively spliced isoforms. The gene encoding FRMD5 maps to human chromosome 15q15.3, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

## REFERENCES

- Hurowitz, G.I., et al. 1993. Neuropsychiatric aspects of adult-onset Tay-Sachs disease: two case reports with several new findings. *J. Neuropsychiatry Clin. Neurosci.* 5: 30-36.
- Gunn-Moore, F.J., et al. 2005. A novel 4.1 ezrin radixin moesin (FERM)-containing protein, "Willin". *FEBS Lett.* 579: 5089-5094.
- Ceccarelli, D.F., et al. 2006. Crystal structure of the FERM domain of focal adhesion kinase. *J. Biol. Chem.* 281: 252-259.
- Midla, G.S. 2008. Diagnosis and management of patients with Marfan syndrome. *JAAPA* 21: 21-25.
- Tepass, U. 2009. FERM proteins in animal morphogenesis. *Curr. Opin. Genet. Dev.* 19: 357-367.
- Ferrer-Bolufer, I., et al. 2009. Tyrosinemia type 1 and Angelman syndrome due to paternal uniparental isodisomy 15. *J. Inherit. Metab. Dis.* 32: S349-S353.

## CHROMOSOMAL LOCATION

Genetic locus: FRMD5 (human) mapping to 15q15.3; Frmd5 (mouse) mapping to 2 E5.

## SOURCE

FRMD5 (D-8) is a mouse monoclonal antibody raised against amino acids 134-173 mapping within an internal region of FRMD5 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FRMD5 (D-8) is available conjugated to agarose (sc-514867 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514867 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514867 PE), fluorescein (sc-514867 FITC), Alexa Fluor® 488 (sc-514867 AF488), Alexa Fluor® 546 (sc-514867 AF546), Alexa Fluor® 594 (sc-514867 AF594) or Alexa Fluor® 647 (sc-514867 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514867 AF680) or Alexa Fluor® 790 (sc-514867 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## APPLICATIONS

FRMD5 (D-8) is recommended for detection of FRMD5 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 FRMD5 siRNA (h): sc-90008, FRMD5 siRNA (m): sc-145242, FRMD5 shRNA Plasmid (h): sc-90008-SH, FRMD5 shRNA Plasmid (m): sc-145242-SH, FRMD5 shRNA (h) Lentiviral Particles: sc-90008-V and FRMD5 shRNA (m) Lentiviral Particles: sc-145242-V.

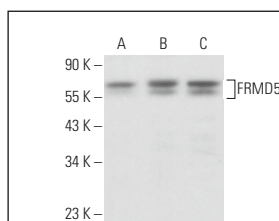
Molecular Weight of FRMD5: 65 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, C6 whole cell lysate: sc-364373 or A-10 cell lysate: sc-3806.

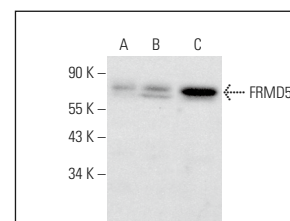
## RECOMMENDED SUPPORT REAGENTS

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



FRMD5 (D-8): sc-514867. Western blot analysis of FRMD5 expression in F9 (A), BC<sub>3</sub>H1 (B) and P19 (C) whole cell lysates.



FRMD5 (D-8): sc-514867. Western blot analysis of FRMD5 expression in HeLa (A), A-10 (B) and C6 (C) 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](http://www.scbt.com) for detailed protocols and support products.