SANTA CRUZ BIOTECHNOLOGY, INC.

MTMR9 (H-1): sc-514366

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Myotubularin and the myotubularin-related proteins belong to a highly conserved family of eukaryotic phosphatases that utilize inositol phospholipids, rather than phosphoproteins, as substrates. MTMR9 (myotubularin-related protein 9), also known as C8orf9, is a 549 amino acid protein that belongs to the protein-tyrosine phosphatase family and non-receptor class myotubularin subfamily. Localizing to the cytoplasm, MTMR9 is expressed in many tissues, including brain. MTMR9 interacts with MTMR6, MTMR7 and MTMR8. As opposed to other members of the myotubularin-related protein family, MTMR9 does not contain a dual-specificity phosphatase domain, and is a probable pseudophosphatase. Containing a double-helical motif similar to the SET interaction domain, MTMR9 may function in the control of cell proliferation.

REFERENCES

1. Appel, S., et al. 2001. Identification and localization of a new human myotubularin-related protein gene, MTMR8, on 8p22-p23. Genomics 75: 6-8.
2. Laporte, J., et al. 2001. The myotubularin family: from genetic disease to phosphoinositide metabolism. Trends Genet. 17: 221-228.
3. Appel, S., et al. 2002. Physical and transcriptional map of the critical region for keratolytic winter erythema (KWE) on chromosome 8p22-p23 between D8S550 and D8S1759. Eur. J. Hum. Genet. 10: 17-25.
4. Yanagiya, T., et al. 2007. Association of single-nucleotide polymorphisms in MTMR9 gene with obesity. Hum. Mol. Genet. 16: 3017-3026.
5. Hotta, K., et al. 2011. Association of variations in the FTO, SCG3 and MTMR9 genes with metabolic syndrome in a Japanese population. J. Hum. Genet. 56: 647-651.

CHROMOSOMAL LOCATION

Genetic locus: MTMR9 (human) mapping to 8p23.1.

SOURCE

MTMR9 (H-1) is a mouse monoclonal antibody raised against amino acids 1-180 mapping at the N-terminus of MTMR9 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MTMR9 (H-1) is available conjugated to agarose (sc-514366 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514366 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514366 PE), fluorescein (sc-514366 FITC), Alexa Fluor® 488 (sc-514366 AF488), Alexa Fluor® 546 (sc-514366 AF546), Alexa Fluor® 594 (sc-514366 AF594) or Alexa Fluor® 647 (sc-514366 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514366 AF680) or Alexa Fluor® 790 (sc-514366 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

MTMR9 (H-1) is recommended for detection of MTMR9 of 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 MTMR9 siRNA (h): sc-61097, MTMR9 shRNA Plasmid (h): sc-61097-SH and MTMR9 shRNA (h) Lentiviral Particles: sc-61097-V.

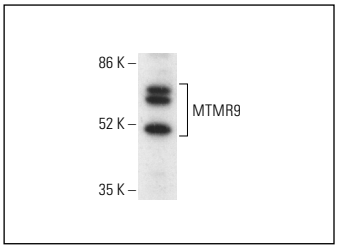
Molecular Weight of MTMR9: 63 kDa.

Positive Controls: HEK293T whole cell lysate: sc-45137 or HeLa whole cell lysate: sc-2200.

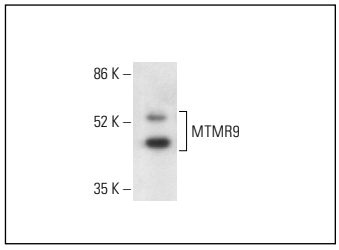
RECOMMENDED SUPPORT REAGENTS

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



MTMR9 (H-1): sc-514366. Western blot analysis of MTMR9 expression in HEK293T whole cell lysate. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.



MTMR9 (H-1): sc-514366. Western blot analysis of MTMR9 expression in HeLa whole cell lysate. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

SELECT PRODUCT CITATIONS

1. Campa, C.C., et al. 2018. Rab11 activity and PtdIns(3)P turnover removes recycling cargo from endosomes. Nat. Chem. Biol. 14: 801-810.

STORAGE

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

PROTOCOLS

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