SANTA CRUZ BIOTECHNOLOGY, INC.

MTMR9 (H-180): sc-99125



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

- 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.
- 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.
- Yanagiya, T., et al. 2007. Association of single-nucleotide polymorphisms in MTMR9 gene with obesity. Hum. Mol. Genet. 16: 3017-3026.
- 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; Mtmr9 (mouse) mapping to 14 D1.

SOURCE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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 or our catalog for detailed protocols and support products.

APPLICATIONS

MTMR9 (H-180) is recommended for detection of MTMR9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

MTMR9 (H-180) is also recommended for detection of MTMR9 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for MTMR9 siRNA (h): sc-61097, MTMR9 siRNA (m): sc-61098, MTMR9 shRNA Plasmid (h): sc-61097-SH, MTMR9 shRNA Plasmid (m): sc-61098-SH, MTMR9 shRNA (h) Lentiviral Particles: sc-61097-V and MTMR9 shRNA (m) Lentiviral Particles: sc-61098-V.

Molecular Weight of MTMR9: 63 kDa.

Positive Controls: HEK293T whole cell lysate: sc-45137.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



MTMR8/9 (H-180): sc-99125. Western blot analysis of MTMR9 expression in non-transfected (**A**) and human MTMR9 transfected (**B**) HEK293T whole cell lysates.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try **MTMR9 (H-1): sc-514366**, our highly recommended monoclonal alternative to MTMR9 (H-180).