

MTMR11 (N-16): sc-243546

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. MTMR11 (myotubularin related protein 11), also known as CRA (cisplatin resistance-associated protein), is a 709 amino acid protein that is thought to function as a pseudophosphatase and exists as six alternatively spliced isoforms. A member of the protein-tyrosine phosphatase family and non-receptor class myotubularin subfamily, MTMR11 contains 1 myotubularin phosphatase domain and is encoded by a gene that maps to human chromosome 1. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

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4. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.
5. Betarbet, R., et al. 2008. Fas-associated factor 1 and Parkinson's disease. *Neurobiol. Dis.* 31: 309-315.
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CHROMOSOMAL LOCATION

Genetic locus: MTMR11 (human) mapping to 1q21.2; Mtmr11 (mouse) mapping to 3 F2.1.

SOURCE

MTMR11 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of MTMR11 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-243546 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MTMR11 (N-16) is recommended for detection of MTMR11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other MTMR family members.

MTMR11 (N-16) is also recommended for detection of MTMR11 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for MTMR11 siRNA (h): sc-88198, MTMR11 siRNA (m): sc-149685, MTMR11 shRNA Plasmid (h): sc-88198-SH, MTMR11 shRNA Plasmid (m): sc-149685-SH, MTMR11 shRNA (h) Lentiviral Particles: sc-88198-V and MTMR11 shRNA (m) Lentiviral Particles: sc-149685-V.

Molecular Weight of MTMR11 isoforms: 80/30/27/72/30/39 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.