MMAA (T-16): sc-243491

BACKGROUND

MMAA (methylmalonic aciduria type A), also known as methylmalonic aciduria (cobalamin deficiency) cblA type, is a 418 amino acid mitochondrial protein that belongs to the ArgK family and is suggested to function as a GTPase. Implicated in the transport of cobalamin into mitochondria during late adenosylcobalamin synthesis, MMAA exists as a widely expressed homodimer that is found at highest levels in skeletal muscle and liver. The gene encoding MMAA maps to human chromosome 4q31.21, and defects in the gene are the cause of an autosomal recessive disease known as methylmalonic aciduria type cblA (MMAA). Chromosome 4 represents approximately 6% of the human genome, contains nearly 900 genes and is associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: MMAA (human) mapping to 4q31.21; Mmaa (mouse) mapping to 8 C2.

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-243491 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MMAA (T-16) is recommended for detection of MMAA 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).

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

Suitable for use as control antibody for MMAA siRNA (h): sc-89276, MMAA siRNA (m): sc-149474, MMAA shRNA Plasmid (h): sc-89276-SH, MMAA shRNA Plasmid (m): sc-149474-SH, MMAA shRNA (h) Lentiviral Particles: sc-89276-V and MMAA shRNA (m) Lentiviral Particles: sc-149474-V.

Molecular Weight of MMAA: 47 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.

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 or our catalog for detailed protocols and support products.