

MRT4 (K-12): sc-165037

BACKGROUND

MRT4 (mRNA turnover 4 homolog (*S. cerevisiae*), also known as MRT04, is a 239 amino acid nucleolar protein that belongs to the ribosomal protein L10P family. Involved in mRNA turnover and ribosome assembly, MRT4 binds the same large ribosomal subunit and shares sequence similarity with Ribosomal Protein LPO. The gene encoding MRT4 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 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. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MRT04 (human) mapping to 1p36.13; Mrto4 (mouse) mapping to 4 D3.

SOURCE

MRT4 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MRT4 of human origin.

RESEARCH USE

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

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-165037 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRT4 (K-12) is recommended for detection of MRT4 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).

Suitable for use as control antibody for MRT4 siRNA (h): sc-88180, MRT4 siRNA (m): sc-149640, MRT4 shRNA Plasmid (h): sc-88180-SH, MRT4 shRNA Plasmid (m): sc-149640-SH, MRT4 shRNA (h) Lentiviral Particles: sc-88180-V and MRT4 shRNA (m) Lentiviral Particles: sc-149640-V.

Molecular Weight of MRT4: 28 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

PROTOCOLS

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