

RMND1 (T-12): sc-137720

BACKGROUND

RMND1 (required for meiotic nuclear division protein 1 homolog), also known as C6orf96, is a 449 amino acid protein that belongs to the RMD1/sif2 family. Existing as three alternatively spliced isoforms, the gene encoding RMND1 maps to human chromosome 6q25.1 and mouse chromosome 10 A1. Human chromosome 6 contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

1. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. *Hum. Mol. Genet.* 3: 1561-1564.
2. Mungall, A.J., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. *Proc. Natl. Acad. Sci. USA* 100: 5956-5961.
3. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. *Genes Chromosomes Cancer* 47: 159-164.
4. Fan, J., et al. 2010. Linkage disequilibrium mapping of the chromosome 6q21-22.31 bipolar I disorder susceptibility locus. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 153B: 29-37.
5. Jalil, S., et al. 2010. Associations among behavior-related susceptibility factors in porphyria cutanea tarda. *Clin. Gastroenterol. Hepatol.* 8: 297-302, 302.

CHROMOSOMAL LOCATION

Genetic locus: RMND1 (human) mapping to 6q25.1; Rmnd1 (mouse) mapping to 10 A1.

SOURCE

RMND1 (T-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of RMND1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137720 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

RMND1 (T-12) is recommended for detection of RMND1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with RMND5A or RMND5B.

RMND1 (T-12) is also recommended for detection of RMND1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RMND1 siRNA (h): sc-95226, RMND1 siRNA (m): sc-152984, RMND1 shRNA Plasmid (h): sc-95226-SH, RMND1 shRNA Plasmid (m): sc-152984-SH, RMND1 shRNA (h) Lentiviral Particles: sc-95226-V and RMND1 shRNA (m) Lentiviral Particles: sc-152984-V.

Molecular Weight of RMND1 isoform 1: 52 kDa.

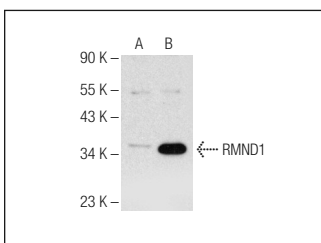
Molecular Weight of RMND1 isoform 2: 23 kDa.

Positive Controls: RMND1 (h): 293T Lysate: sc-111756.

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



RMND1 (T-12): sc-137720. Western blot analysis of RMND1 expression in non-transfected: sc-117752 (A) and human RMND1 transfected: sc-111756 (B) 293T whole cell lysates.

PROTOCOLS

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