

LRTM2 (I-13): sc-139534

BACKGROUND

Leucine-rich repeats (LRRs) are 20-30 amino acid motifs that mediate protein-protein interactions. The primary function of these motifs is to provide a versatile structural framework for the formation of these protein-protein interactions. LRRs are present in a variety of proteins with diverse structure and function, including innate immunity and nervous system development. Several human diseases are associated with mutations in the genes encoding LRR-containing proteins. LRTM2 (leucine-rich repeat and transmembrane domain-containing protein 2) is a 370 amino acid single-pass type I membrane protein that contains 6 LRR repeats. The gene encoding LRTM2 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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5. Chen, Y., et al. 2006. AMIGO and friends: an emerging family of brain-enriched, neuronal growth modulating, type I transmembrane proteins with leucine-rich repeats (LRR) and cell adhesion molecule motifs. *Brain Res. Rev.* 51: 265-274.
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7. Ko, J., et al. 2007. Leucine-rich repeat proteins of synapses. *J. Neurosci. Res.* 85: 2824-2832.
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CHROMOSOMAL LOCATION

Genetic locus: LRTM2 (human) mapping to 12p13.33; Lrtm2 (mouse) mapping to 6 F1.

SOURCE

LRTM2 (I-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of LRTM2 of human origin.

RESEARCH USE

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

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-139534 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRTM2 (I-13) is recommended for detection of LRTM2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), 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 LRTM1 family member.

LRTM2 (I-13) is also recommended for detection of LRTM2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LRTM2 siRNA (h): sc-96202, LRTM2 siRNA (m): sc-149126, LRTM2 shRNA Plasmid (h): sc-96202-SH, LRTM2 shRNA Plasmid (m): sc-149126-SH, LRTM2 shRNA (h) Lentiviral Particles: sc-96202-V and LRTM2 shRNA (m) Lentiviral Particles: sc-149126-V.

Molecular Weight of LRTM2: 41 kDa.

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) 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.

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.