

RLTPR (N-15): sc-244022

BACKGROUND

RLTPR (RGD motif, leucine rich repeats, tropomodulin domain and proline-rich containing), also known as CARMIL2, LRRC16C (leucine-rich repeat-containing protein 16C) or CARMIL2b, is a 1,435 amino acid protein that belongs to the CARMIL family and contains 16 LRR (leucine-rich) repeats. Expressed in skin fibroblasts and keratinocytes, thymus, spleen, peripheral blood, colon, leukocytes and fetal skin, RLTPR is thought to have a role in cell migration. The gene encoding RLTPR maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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- Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
- Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. *Curr. Gastroenterol. Rep.* 6: 467-473.
- Matsuzaka, Y., et al. 2004. Identification, expression analysis and polymorphism of a novel RLTPR gene encoding a RGD motif, tropomodulin domain and proline/leucine-rich regions. *Gene* 343: 291-304.
- Mathew, C.G. and Lewis, C.M. 2004. Genetics of inflammatory bowel disease: progress and prospects. *Hum. Mol. Genet.* 13: R161-R168.
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- Liang, Y., et al. 2009. Distinct roles for CARMIL isoforms in cell migration. *Mol. Biol. Cell* 20: 5290-5305.

CHROMOSOMAL LOCATION

Genetic locus: RLTPR (human) mapping to 16q22.1; Rltpr (mouse) mapping to 8 D3.

SOURCE

RLTPR (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of RLTPR 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-244022 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RLTPR (N-15) is recommended for detection of RLTPR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

RLTPR (N-15) is also recommended for detection of RLTPR in additional species, including equine, canine and porcine.

Suitable for use as control antibody for RLTPR siRNA (h): sc-93507, RLTPR siRNA (m): sc-152982, RLTPR shRNA Plasmid (h): sc-93507-SH, RLTPR shRNA Plasmid (m): sc-152982-SH, RLTPR shRNA (h) Lentiviral Particles: sc-93507-V and RLTPR shRNA (m) Lentiviral Particles: sc-152982-V.

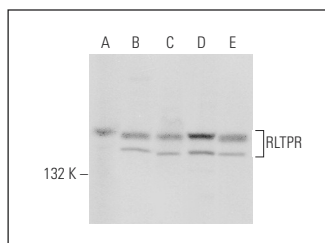
Molecular Weight of RLTPR: 155 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



RLTPR (N-15): sc-244022. Western blot analysis of RLTPR expression in mouse thymus tissue extract (A), HeLa (B), Jurkat (C), K-562 (D) and Hep G2 (E) whole cell lysates.

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.