SANTA CRUZ BIOTECHNOLOGY, INC.

RLTPR (E-15): sc-244023



The Power to Question

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

- Baraitser, M. and Preece, M.A. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
- Bomont, P., Cavalier, L., Blondeau, F., Ben Hamida, C., Belal, S., Tazir, M., Demir, E., Topaloglu, H., Korinthenberg, R., Tüysüz, B., Landrieu, P., Hentati, F. and Koenig, M. 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., Okamoto, K., Mabuchi, T., Iizuka, M., Ozawa, A., Oka, A., Tamiya, G., Kulski, J.K. and Inoko, H. 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.
- 5. Mathew, C.G. and Lewis, C.M. 2004. Genetics of inflammatory bowel disease: progress and prospects. Hum. Mol. Genet. 13: R161-R168.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610859. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Liang, Y., Niederstrasser, H., Edwards, M., Jackson, C.E. and Cooper, J.A. 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 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RLTPR of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244023 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RLTPR (E-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), 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 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.

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) Immunofluo-rescence: 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.

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.