SANTA CRUZ BIOTECHNOLOGY, INC.

LRRC21 (N-14): sc-103600



The Power to Question

BACKGROUND

The leucine-rich (LRR) repeat is a 20-30 amino acid motif that forms a hydrophobic α/β horseshoe fold, allowing it to accommodate several leucine residues within a tightly packed core. All LRR repeats contain a variable segment and a highly conserved segment, the latter of which accounts for 11 or 12 residues of the entire LRR motif. The primary function of these motifs is to provide a versatile structural framework to mediate the formation of 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 genes encoding LRR-containing proteins. The leucine-rich repeat-containing protein 21 (LRRC21), also designated leucine-rich repeat, immunoglobulin-like domain and transmembrane domain-containing protein 1 (LRIT1) or PAL, is a 623 amino acid protein that contains 6 LRR repeats. LRRC21 is expressed in retina and may play a role in phototransduction.

REFERENCES

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- van Rooijen, E., Giles, R.H., Voest, E.E., van Rooijen, C., Schulte-Merker, S. and van Eeden, F.J. 2008. LRRC50, a conserved ciliary protein implicated in polycystic kidney disease. J. Am. Soc. Nephrol. 19: 1128-1138.

CHROMOSOMAL LOCATION

Genetic locus: LRIT1 (human) mapping to 10q23.1.

SOURCE

LRRC21 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LRRC21 of human origin.

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-103600 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRRC21 (N-14) is recommended for detection of LRRC21 of 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); non cross-reactive with other LRRC family members.

Suitable for use as control antibody for LRRC21 siRNA (h): sc-90692, LRRC21 shRNA Plasmid (h): sc-90692-SH and LRRC21 shRNA (h) Lentiviral Particles: sc-90692-V.

Molecular Weight of LRRC21: 68 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-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **D0 N0T 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.

PROTOCOLS

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