SANTA CRUZ BIOTECHNOLOGY, INC.

LRRC10 (S-17): sc-168480

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. LRRC10 (leucine-rich repeat-containing protein 10), also known as HRLRRP or LRRC10A, is a 277 amino acid protein that contains 8 LRR repeats. Localized to the nucleus, LRRC10 may play an important role in cardiac development and/or cardiac function. The gene that encodes LRRC10 maps to human chromosome 12q15 and murine chromosome 10 D2.

REFERENCES

1. Kobe, B., et al. 2001. The leucine-rich repeat as a protein recognition motif. Curr. Opin. Struct. Biol. 11: 725-732.
2. Suzuki, T., et al. 2002. Identification and mutational analysis of candidate genes for juvenile myoclonic epilepsy on 6p11-p12: LRRC1, GCLC, KIAA0057 and CLIC5. Epilepsy Res. 50: 265-275.
3. Nakane, T., et al. 2004. Molecular cloning and expression of HRLRRP, a novel heart-restricted leucine-rich repeat protein. Biochem. Biophys. Res. Commun. 314: 1086-1092.
4. Matsushima, N., et al. 2005. Structural analysis of leucine-rich-repeat variants in proteins associated with human diseases. Cell. Mol. Life Sci. 62: 2771-2791.
5. Gudbjartsson, D.F., et al. 2008. Many sequence variants affecting diversity of adult human height. Nat. Genet. 40: 609-615.

CHROMOSOMAL LOCATION

Genetic locus: LRRC10 (human) mapping to 12q15; Lrrc10 (mouse) mapping to 10 D2.

SOURCE

LRRC10 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LRRC10 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-168480 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.

APPLICATIONS

LRRC10 (S-17) is recommended for detection of LRRC10 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); non cross-reactive with other LRRC family members.

LRRC10 (S-17) is also recommended for detection of LRRC10 in additional species, including bovine.

Suitable for use as control antibody for LRRC10 siRNA (h): sc-96188, LRRC10 siRNA (m): sc-149052, LRRC10 shRNA Plasmid (h): sc-96188-SH, LRRC10 shRNA Plasmid (m): sc-149052-SH, LRRC10 shRNA (h) Lentiviral Particles: sc-96188-V and LRRC10 shRNA (m) Lentiviral Particles: sc-149052-V.

Molecular Weight of LRRC10: 32 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) 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.

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.