

LRRC15 (L-20): sc-103009

BACKGROUND

Leucine-rich repeats (LRRs) are 20-29 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 genes encoding LRR-containing proteins. The leucine-rich repeat-containing protein 15 (LRRC15, also designated LIB) is a 581 amino acid protein that contains 15 LRR repeats and is involved in cell-cell and/or -extracellular matrix interactions. LRRC15 is frequently overexpressed in multiple tumor types, most notably breast carcinoma. It is also associated with the pathogenesis of Alzheimer's disease.

REFERENCES

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3. Satoh, K., et al. 2004. High lib mRNA expression in breast carcinomas. *DNA Res.* 11: 199-203.
4. Satoh, K., et al. 2005. Lib, transcriptionally induced in senile plaque-associated astrocytes, promotes glial migration through extracellular matrix. *Biochem. Biophys. Res. Commun.* 335: 631-636.
5. 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.
6. 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.
7. Dolan, J., et al. 2007. The extracellular leucine-rich repeat superfamily; a comparative survey and analysis of evolutionary relationships and expression patterns. *BMC Genomics* 8: 320.

CHROMOSOMAL LOCATION

Genetic locus: LRRC15 (human) mapping to 3q29; Lrrc15 (mouse) mapping to 16 B2.

SOURCE

LRRC15 (L-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of LRRC15 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103009 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRRC15 (L-20) is recommended for detection of LRRC15 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 other LRRC family members.

LRRC15 (L-20) is also recommended for detection of LRRC15 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for LRRC15 siRNA (h): sc-78195, LRRC15 siRNA (m): sc-149054, LRRC15 shRNA Plasmid (h): sc-78195-SH, LRRC15 shRNA Plasmid (m): sc-149054-SH, LRRC15 shRNA (h) Lentiviral Particles: sc-78195-V and LRRC15 shRNA (m) Lentiviral Particles: sc-149054-V.

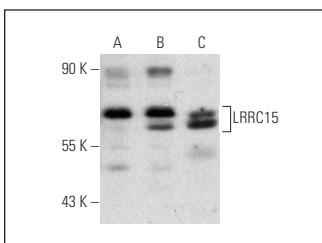
Molecular Weight of LRRC15: 64 kDa.

Positive Controls: JAR cell lysate: sc-2276, IMR-32 cell lysate: sc-2409 or SH-SY5Y cell lysate: sc-3812.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



LRRC15 (L-20): sc-103009. Western blot analysis of LRRC15 expression in IMR-32 (A), SH-SY5Y (B) and JAR (C) 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.