

LRRC25 (A-13): sc-138394

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. LRRC25 (leucine-rich repeat-containing protein 25), also known as MAPA (monocyte and plasmacytoid-activated protein) or FLJ38116, is a 305 amino acid protein that contains 2 LRR repeats. LRRC25 is a single-pass type I membrane protein that is expressed in monocyte-derived dendritic cells (MDDC), granulocytes, monocytes, plasmacytoid dendritic cells (PDC), B-lymphocytes, peripheral blood leukocytes, spleen and bone marrow, with lower levels in lymph nodes, fetal liver, and appendix. LRRC25 may play a role in the activation of cells of innate and acquired immunity.

REFERENCES

1. Kobe, B., et al. 2001. The leucine-rich repeat as a protein recognition motif. *Curr. Opin. Struct. Biol.* 11: 725-732.
2. Rissoan, M.C., et al. 2002. Subtractive hybridization reveals the expression of immunoglobulin-like transcript 7, Eph-B1, granzyme B, and 3 novel transcripts in human plasmacytoid dendritic cells. *Blood* 100: 3295-3303.
3. 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.
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. Svendsen, J.M., et al. 2009. Mammalian BTBD12/SLX4 assembles a Holliday junction resolvase and is required for DNA repair. *Cell* 138: 63-77.

CHROMOSOMAL LOCATION

Genetic locus: LRRC25 (human) mapping to 19p13.11.

SOURCE

LRRC25 (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of LRRC25 of human origin.

PRODUCT

Each vial contains 200 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-138394 P, (100 μ g 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

RRC25 (A-13) is recommended for detection of LRRC25 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); non cross-reactive with other LRRC family members.

Suitable for use as control antibody for LRRC25 siRNA (h): sc-97675, LRRC25 shRNA Plasmid (h): sc-97675-SH and LRRC25 shRNA (h) Lentiviral Particles: sc-97675-V.

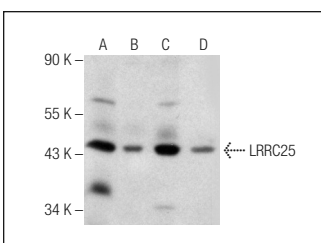
Molecular Weight of LRRC25: 33 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Daudi cell lysate: sc-2415 or Caco-2 cell lysate: sc-2262.

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



LRRC25 (A-13): sc-138394. Western blot analysis of LRRC25 expression in HL-60 (A), Daudi (B), Caco-2 (C) and SH-SY5Y (D) whole cell lysates.

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.