

LRRC40 (I-13): sc-137582

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. LRRC40 (leucine rich repeat containing 40) is a 602 amino acid protein that contains 20 LRR (leucine-rich) repeats.

REFERENCES

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- Kobe, B. and Kajava, A.V. 2001. The leucine-rich repeat as a protein recognition motif. *Curr. Opin. Struct. Biol.* 11: 725-732.
- Hofman, P., et al. 2001. Lack of blood-brain barrier properties in microvessels of the prelaminar optic nerve head. *Invest. Ophthalmol. Vis. Sci.* 42: 895-901.
- Hughes, J.M., et al. 2004. Vascular leucocyte adhesion molecules unaltered in the human retina in diabetes. *Br. J. Ophthalmol.* 88: 566-572.
- Kuiper, E.J., et al. 2004. Differential expression of connective tissue growth factor in microglia and pericytes in the human diabetic retina. *Br. J. Ophthalmol.* 88: 1082-1087.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: LRRC40 (human) mapping to 1p31.1; *Lrrc40* (mouse) mapping to 3 H4.

SOURCE

LRRC40 (I-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of LRRC40 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-137582 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

LRRC40 (I-13) is recommended for detection of LRRC40 of mouse 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.

LRRC40 (I-13) is also recommended for detection of LRRC40 in additional species, including equine.

Suitable for use as control antibody for LRRC40 siRNA (h): sc-88575, LRRC40 siRNA (m): sc-149079, LRRC40 shRNA Plasmid (h): sc-88575-SH, LRRC40 shRNA Plasmid (m): sc-149079-SH, LRRC40 shRNA (h) Lentiviral Particles: sc-88575-V and LRRC40 shRNA (m) Lentiviral Particles: sc-149079-V.

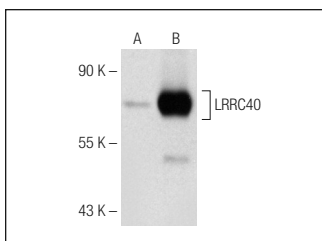
Molecular Weight of LRRC40: 68 kDa.

Positive Controls: LRRC40 (h2): 293T Lysate: sc-112258.

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



LRRC40 (I-13): sc-137582. Western blot analysis of LRRC40 expression in non-transfected: sc-117752 (A) and human LRRC40 transfected: sc-112258 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **LRRC40 (C-8): sc-515101**, our highly recommended monoclonal alternative to LRRC40 (I-13).