

LRRC62 (V-13): sc-86718

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 mutation in the genes encoding LRR-containing proteins. The leucine-rich repeat and fibronectin type-III domain-containing protein 62 (LRRC62), also designated extracellular leucine-rich repeat and fibronectin type III domain-containing protein 2 (ELFN2), is a 820 amino acid protein that contains 5 LRR repeats. The gene encoding LRRC62 maps to chromosome 22, which contains over 500 genes and about 49 million bases. Translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia chromosome and the subsequent production of the novel fusion protein, Bcr-Abl, a potent cell proliferation activator found in several types of leukemia.

REFERENCES

- Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
- Kobe, B., et al. 2001. The leucine-rich repeat as a protein recognition motif. *Curr. Opin. Struct. Biol.* 11: 725-732.
- Tsilchorozidou, T., et al. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. *J. Med. Genet.* 41: 529-534.
- 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.
- 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.
- Zheng, X., et al. 2006. BCR and its mutants, the reciprocal t(9;22)-associated Abl/BCR fusion proteins, differentially regulate the cytoskeleton and cell motility. *BMC Cancer* 6: 262.
- Hay, B.N. 2007. Deletion 22q11: spectrum of associated disorders. *Semin. Pediatr. Neurol.* 14: 136-139.
- 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.
- Ko, J., et al. 2007. Leucine-rich repeat proteins of synapses. *J. Neurosci. Res.* 85: 2824-2832.

CHROMOSOMAL LOCATION

Genetic locus: ELFN2 (human) mapping to 22q13.1; Elfn2 (mouse) mapping to 15 E1.

SOURCE

LRRC62 (V-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of LRRC62 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-86718 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRRC62 (V-13) is recommended for detection of LRRC62 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

LRRC62 (V-13) is also recommended for detection of LRRC62 in additional species, including equine, canine, bovine and porcine.

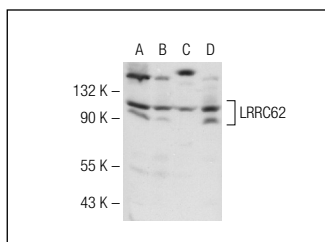
Suitable for use as control antibody for LRRC62 siRNA (h): sc-75700, LRRC62 siRNA (m): sc-149100, LRRC62 shRNA Plasmid (h): sc-75700-SH, LRRC62 shRNA Plasmid (m): sc-149100-SH, LRRC62 shRNA (h) Lentiviral Particles: sc-75700-V and LRRC62 shRNA (m) Lentiviral Particles: sc-149100-V.

Molecular Weight (predicted) of LRRC62: 90 kDa.

Molecular Weight (observed) of LRRC62: 90-102 kDa.

Positive Controls: A549 cell lysate: sc-2413, BJAB whole cell lysate: sc-2207 or T3 671 whole cell lysate.

DATA



LRRC62 (V-13): sc-86718. Western blot analysis of LRRC62 expression in T3 671 (A), BJAB (B), A549 (C) and Raji (D) 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.

PROTOCOLS

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