

# LRRC31 (N-12): sc-103016

## 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 31 (LRRC31) is a 552 amino acid protein that contains 8 LRR repeats. The gene encoding LRRC31 maps to chromosome 3, which encodes over 1,100 genes. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

## REFERENCES

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7. Muzny, et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.
8. 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: LRRC31 (human) mapping to 3q26.2.

## SOURCE

LRRC31 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LRRC31 of human origin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## 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-103016 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LRRC31 (N-12) is recommended for detection of LRRC31 of 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); non cross-reactive with other LRRC family members.

Suitable for use as control antibody for LRRC31 siRNA (h): sc-78511, LRRC31 shRNA Plasmid (h): sc-78511-SH and LRRC31 shRNA (h) Lentiviral Particles: sc-78511-V.

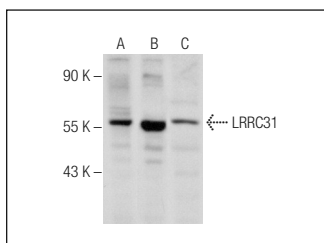
Molecular Weight of LRRC31 isoforms: 61/55/38 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, MOLT-4 cell lysate: sc-2233 or human liver tissue extract.

## 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



LRRC31 (N-12): sc-103016. Western blot analysis of LRRC31 expression in HL-60 (A) and MOLT-4 (B) whole cell lysates and human liver tissue extract (C).

## RESEARCH USE

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