SANTA CRUZ BIOTECHNOLOGY, INC.

LRRC58 (C-4): sc-515597

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

LRRC58 (leucine-rich repeat-containing protein 58) is a 371 amino acid protein that contains 9 LRR (leucine-rich repeats). The gene that encodes LRRC58 consists of approximately 25,000 bases and maps to human chromosome 3q13.33. As one of the largest human chromosomes, chromosome 3 has the lowest rate of segmental duplication in the genome. It also contains a chemokine receptor gene group as well as a number of loci involved in multiple human cancers. There is an average gene density of 8.8 genes per Mb on chromosome 3, making it one of the more gene-poor chromosomes. Although the average gene density is low, the genes that make up chromosome 3 are larger than average and make up about 49% of the chromosome. A 13.6-cM region on 3p21.31-21.2, where a tumor suppressor gene cluster is located, is believed to be a novel locus for nasopharyngeal carcinoma.

REFERENCES

1. Collod, G., et al. 1994. A second locus for Marfan syndrome maps to chromosome 3p24.2-p25. Nat. Genet. 8: 264-268.
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3. Maho, A., et al. 1999. Mapping of the CCXCR1, CX3CR1, CCBP2 and CCR9 genes to the CCR cluster within the 3p21.3 region of the human genome. Cytogenet. Cell Genet. 87: 265-268.
4. Robinson, P.N. and Godfrey, M. 2000. The molecular genetics of Marfan syndrome and related microfibrillopathies. J. Med. Genet. 37: 9-25.
5. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. Mol. Biol. 37: 194-211.
6. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
7. Pfeifer, G.P. and Dammann, R. 2005. Methylation of the tumor suppressor gene RASSF1A in human tumors. Biochemistry 70: 576-583.
8. Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. Genomics 85: 36-47.

CHROMOSOMAL LOCATION

Genetic locus: LRRC58 (human) mapping to 3q13.33; Lrrc58 (mouse) mapping to 16 B3.

SOURCE

LRRC58 (C-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 263-287 within an internal region of LRRC58 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 IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-515597 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

LRRC58 (C-4) is recommended for detection of LRRC58 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for LRRC58 siRNA (h): sc-270629, LRRC58 siRNA (m): sc-149096, LRRC58 shRNA Plasmid (h): sc-270629-SH, LRRC58 shRNA Plasmid (m): sc-149096-SH, LRRC58 shRNA (h) Lentiviral Particles: sc-270629-V and LRRC58 shRNA (m) Lentiviral Particles: sc-149096-V.

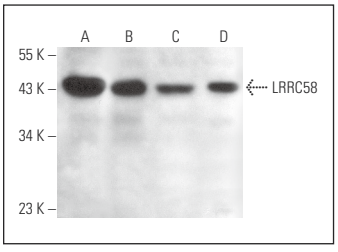
Molecular Weight of LRRC58: 41 kDa.

Positive Controls: LNCaP cell lysate: sc-2231, MDA-MB-468 cell lysate: sc-2282 or Jurkat whole cell lysate: sc-2204

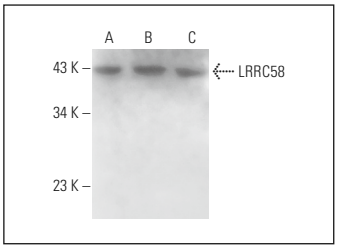
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



LRRC58 (C-4): sc-515597. Western blot analysis of LRRC58 expression in LNCaP (**A**), MDA-MB-468 (**B**) and Jurkat (**C**) whole cell lysates and human adrenal gland tissue extract (**D**).



LRRC58 (C-4): sc-515597. Western blot analysis of LRRC58 expression in Jurkat (**A**), SW-13 (**B**) and U-87 MG (**C**) whole cell lysates.

RESEARCH USE

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