# SANTA CRUZ BIOTECHNOLOGY, INC.

# LRRC32 (Q-12): sc-168483



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# BACKGROUND

The leucine-rich (LRR) repeat is a 20-30 amino acid motif that forms a hydrophobic  $\alpha/\beta$  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. LRRC32 (leucine rich repeat containing 32), also known as GARP, is a 662 amino acid single-pass type I membrane protein that contains 22 LRR repeats and is thought to be involved in plateletendothelium interactions, as well as in the development of rare, benign hibernomas. The gene encoding LRRC32 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

#### REFERENCES

- Ollendorff, V., et al. 1992. New gene in the homologous human 11q13-q14 and mouse 7F chromosomal regions. Mamm. Genome 2: 195-200.
- 2. Ollendorff, V., et al. 1994. The GARP gene encodes a new member of the family of leucine-rich repeat-containing proteins. Cell Growth Differ. 5: 213-219.
- 3. Kobe, B., et al. 1994. The leucine-rich repeat: a versatile binding motif. Trends Biochem. Sci. 19: 415-421.
- Kobe, B., et al. 1995. Proteins with leucine-rich repeats. Curr. Opin. Struct. Biol. 5: 409-416.
- 5. Roubin, R., et al. 1996. Structure and developmental expression of mouse GARP, a gene encoding a new leucine-rich repeat-containing protein. Int. J. Dev. Biol. 40: 545-555.
- Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 137207. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 7. Kobe, B., et al. 2001. The leucine-rich repeat as a protein recognition motif. Curr. Opin. Struct. Biol. 11: 725-732.

# CHROMOSOMAL LOCATION

Genetic locus: LRRC32 (human) mapping to 11q13.5; Lrrc32 (mouse) mapping to 7 E2.

#### SOURCE

LRRC32 (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of LRRC32 of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168483 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# APPLICATIONS

LRRC32 (Q-12) is recommended for detection of LRRC32 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); non cross-reactive with other LRRC family members.

LRRC32 (Q-12) is also recommended for detection of LRRC32 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LRRC32 siRNA (h): sc-96478, LRRC32 siRNA (m): sc-149071, LRRC32 shRNA Plasmid (h): sc-96478-SH, LRRC32 shRNA Plasmid (m): sc-149071-SH, LRRC32 shRNA (h) Lentiviral Particles: sc-96478-V and LRRC32 shRNA (m) Lentiviral Particles: sc-149071-V.

Molecular Weight of LRRC32: 72 kDa.

Positive Controls: rat placenta tissue extract: sc-364808.

# **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



LRRC32 (Q-12): sc-168483. Western blot analysis of LRRC32 expression in rat placenta tissue extract.

#### **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.