## SANTA CRUZ BIOTECHNOLOGY, INC.

# LRRC57 (N-12): sc-138413



The Power to Question

## 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. LRRC57 (leucine rich repeat containing 57) is a 239 amino acid protein that contains 8 LRR repeats and is encoded by a gene that maps to human chromosome 15q15.2. Chromosome 15 houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

## REFERENCES

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- 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.
- 3. Chen, Y., et al. 2006. AMIGO and friends: an emerging family of brainenriched, neuronal growth modulating, type I transmembrane proteins with leucine-rich repeats (LRR) and cell adhesion molecule motifs. Brain Res. Rev. 51: 265-274.
- 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.
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- 7. Dan, B. 2009. Angelman syndrome: current understanding and research prospects. Epilepsia 50: 2331-2339.
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## CHROMOSOMAL LOCATION

Genetic locus: LRRC57 (human) mapping to 15q15.2; Lrrc57 (mouse) mapping to 2 E5.

## SOURCE

LRRC57 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of LRRC57 of human origin.

## PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138413 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

LRRC57 (N-12) is recommended for detection of LRRC57 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), 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.

LRRC57 (N-12) is also recommended for detection of LRRC57 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LRRC57 siRNA (h): sc-90261, LRRC57 siRNA (m): sc-149095, LRRC57 shRNA Plasmid (h): sc-90261-SH, LRRC57 shRNA Plasmid (m): sc-149095-SH, LRRC57 shRNA (h) Lentiviral Particles: sc-90261-V and LRRC57 shRNA (m) Lentiviral Particles: sc-149095-V.

Molecular Weight of LRRC57: 27 kDa.

### **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) Immunofluo-rescence: 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.

### **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.