# SANTA CRUZ BIOTECHNOLOGY, INC.

# ISLR (N-12): sc-137536



#### 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. ISLR (immunoglobulin superfamily containing leucine-rich repeat) is a 428 amino acid secreted protein that contains one lg-like domain and 6 LRR repeats and is expressed in a variety of tissues, including ovary, heart, thyroid, testis, prostate and spinal cord. Via its Ig and LRR domains, ISLR is thought to play a role in adhesion or binding to other proteins at the cell surface.

#### REFERENCES

- 1. Kobe, B. and Deisenhofer, J. 1994. The leucine-rich repeat: a versatile binding motif. Trends Biochem. Sci. 19: 415-421.
- 2. Kobe, B. and Deisenhofer, J. 1995. Proteins with leucine-rich repeats. Curr. Opin. Struct. Biol. 5: 409-416.
- Nagasawa, A., Kubota, R., Imamura, Y., Nagamine, K., Wang, Y., Asakawa, S., Kudoh, J., Minoshima, S., Mashima, Y., Oguchi, Y. and Shimizu, N. 1997. Cloning of the cDNA for a new member of the immunoglobulin superfamily (ISLR) containing leucine-rich repeat (LRR). Genomics 44: 273-279.
- 4. Online Mendelian Inheritance in Man, OMIM™. 1997. Johns Hopkins University, Baltimore, MD. MIM Number: 602059. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Nagasawa, A., Kudoh, J., Noda, S., Mashima, Y., Wright, A., Oguchi, Y. and Shimizu, N. 1999. Human and mouse ISLR (immunoglobulin superfamily containing leucine-rich repeat) genes: genomic structure and tissue expression. Genomics 61: 37-43.
- 6. Kobe, B. and Kajava, A.V. 2001. The leucine-rich repeat as a protein recognition motif. Curr. Opin. Struct. Biol. 11: 725-732.
- 7. Homma, S., Shimada, T., Hikake, T. and Yaginuma, H. 2009. Expression pattern of LRR and Ig domain-containing protein (LRRIG protein) in the early mouse embryo. Gene Expr. Patterns 9: 1-26.

#### CHROMOSOMAL LOCATION

Genetic locus: ISLR (human) mapping to 15q24.1; Islr (mouse) mapping to 9 B.

#### SOURCE

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

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PROTOCOLS

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

### 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-137536 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

ISLR (N-12) is recommended for detection of ISLR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ISLR2.

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

Suitable for use as control antibody for ISLR siRNA (h): sc-90174, ISLR siRNA (m): sc-146298, ISLR shRNA Plasmid (h): sc-90174-SH, ISLR shRNA Plasmid (m): sc-146298-SH, ISLR shRNA (h) Lentiviral Particles: sc-90174-V and ISLR shRNA (m) Lentiviral Particles: sc-146298-V.

Molecular Weight of ISLR: 46 kDa.

#### **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) Immunofluo-rescence: 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.

#### **RESEARCH USE**

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