

# LRRC17 (N-12): sc-137575

## 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. LRRC17 (leucine-rich repeat-containing protein 17), also known as p37NB, is a 441 amino acid protein that localizes to the cytoplasm and contains 6 LRR repeats. The protein is expressed at high levels in ovary, heart, pancreas, skeletal muscle, lung, and fetal kidney and lung. LRRC17 is expressed at higher levels in non-neuronal (S-type) neuroblastoma cells than in neuroblastic (N-type) neuroblastoma cells.

## REFERENCES

1. Kobe, B., et al. 1994. The leucine-rich repeat: a versatile binding motif. *Trends Biochem. Sci.* 19: 415-421.
2. Kobe, B., et al. 1995. Proteins with leucine-rich repeats. *Curr. Opin. Struct. Biol.* 5: 409-416.
3. Kim, D., et al. 1996. A cDNA encoding a putative 37 kDa leucine-rich repeat (LRR) protein, p37NB, isolated from S-type neuroblastoma cell has a differential tissue distribution. *Biochim. Biophys. Acta* 1309: 183-188.
4. Kobe, B., et al. 2001. The leucine-rich repeat as a protein recognition motif. *Curr. Opin. Struct. Biol.* 11: 725-732.
5. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. *Nature* 424: 157-164.
6. Kedzierski, L, et al. 2004. Leucine-rich repeats in host-pathogen interactions. *Arch. Immunol. Ther. Exp.* 52: 104-112.
7. Enkhbayar, P., et al. 2004. Structural principles of leucine-rich repeat (LRR) proteins. *Proteins* 54: 394-403.
8. 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.

## CHROMOSOMAL LOCATION

Genetic locus: LRRC17 (human) mapping to 7q22.1; Lrrc17 (mouse) mapping to 5 A3.

## SOURCE

LRRC17 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of LRRC17 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-137575 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

LRRC17 (N-12) is recommended for detection of LRRC17 isoforms 1 and 2 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.

LRRC17 (N-12) is also recommended for detection of LRRC17 isoforms 1 and 2 in additional species, including equine and porcine.

Suitable for use as control antibody for LRRC17 siRNA (h): sc-89649, LRRC17 siRNA (m): sc-149056, LRRC17 shRNA Plasmid (h): sc-89649-SH, LRRC17 shRNA Plasmid (m): sc-149056-SH, LRRC17 shRNA (h) Lentiviral Particles: sc-89649-V and LRRC17 shRNA (m) Lentiviral Particles: sc-149056-V.

Molecular Weight of LRRC17: 37 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

## 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) Immunofluorescence: 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.