

# LRRC28 (P-12): sc-138399

## 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. The primary function of these motifs is to provide a versatile structural framework to mediate the formation of protein-protein interactions. LRRs are present in a variety of proteins with diverse structure and function, including innate immunity and nervous system development. Several human diseases are associated with mutations in genes encoding LRR-containing proteins. LRRC28 (leucine-rich repeat-containing protein 28) is a 367 amino acid protein that contains nine LRR (leucine-rich) repeats and exists as three alternatively spliced isoforms.

## REFERENCES

- Gomi, F., et al. 2000. Molecular cloning of a novel membrane glycoprotein, pal, specifically expressed in photoreceptor cells of the retina and containing leucine-rich repeat. *J. Neurosci.* 20: 3206-3213.
- Kobe, B., et al. 2001. The leucine-rich repeat as a protein recognition motif. *Curr. Opin. Struct. Biol.* 11: 725-732.
- Hofman, P., et al. 2001. Lack of blood-brain barrier properties in microvessels of the prelaminar optic nerve head. *Invest. Ophthalmol. Vis. Sci.* 42: 895-901.
- Hughes, J.M., et al. 2004. Vascular leucocyte adhesion molecules unaltered in the human retina in diabetes. *Br. J. Ophthalmol.* 88: 566-572.
- Kuiper, E.J., et al. 2004. Differential expression of connective tissue growth factor in microglia and pericytes in the human diabetic retina. *Br. J. Ophthalmol.* 88: 1082-1087.
- 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: LRRC28 (human) mapping to 15q26.3; Lrrc28 (mouse) mapping to 7 C.

## SOURCE

LRRC28 (P-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of LRRC28 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-138399 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

LRRC28 (P-12) is recommended for detection of LRRC28 isoforms 1 and 3 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 isoform LRRC-2; non cross-reactive with other LRRC family members.

LRRC28 (P-12) is also recommended for detection of LRRC28 isoforms 1 and 3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LRRC28 siRNA (h): sc-89915, LRRC28 siRNA (m): sc-149067, LRRC28 shRNA Plasmid (h): sc-89915-SH, LRRC28 shRNA Plasmid (m): sc-149067-SH, LRRC28 shRNA (h) Lentiviral Particles: sc-89915-V and LRRC28 shRNA (m) Lentiviral Particles: sc-149067-V.

Molecular Weight of LRRC28 isoforms: 42/36/32 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) 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.

## RESEARCH USE

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

## PROTOCOLS

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