

PODNL1 (L-16): sc-243840

BACKGROUND

PODNL1 (podocan-like 1), also known as SLRR5B, is a 512 amino acid protein that contains 16 leucine-rich repeats (LRR) and belongs to the small leucine-rich proteoglycan (SLRP) family and the SLRP class V subfamily. Conserved in chimpanzee, canine, bovine, mouse and rat, PODNL1 exists as two alternatively spliced isoforms. The gene that encodes PODNL1 maps to human chromosome 19p13.12, where a novel 2.52 Mb deletion can occur, possibly resulting in multiple congenital anomalies, including deafness, lacrimal duct stenosis, strabismus, bilateral cervical sinuses, congenital cardiac defects, hypoplasia of the corpus callosum and hypoplasia of the cerebellar vermis. Chromosome 19 consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 contains the greatest gene density of the human chromosomes and is the genetic home for a number of immunoglobulin superfamily members, including killer cell and leukocyte Ig-like receptors, ICAMs, the CEACAM and PSG families, and Fc α receptors.

REFERENCES

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2. Parham, P. 2005. Immunogenetics of killer cell immunoglobulin-like receptors. *Mol. Immunol.* 42: 459-462.
3. Jensen, D.R., et al. 2009. A novel chromosome 19p13.12 deletion in a child with multiple congenital anomalies. *Am. J. Med. Genet. A* 149A: 396-402.
4. Staub, E., et al. 2009. An expression module of WIPF1-coexpressed genes identifies patients with favorable prognosis in three tumor types. *J. Mol. Med.* 87: 633-644.
5. Schmidt, L.J., et al. 2009. Effects of the 5 alpha-reductase inhibitor dutasteride on gene expression in prostate cancer xenografts. *Prostate* 69: 1730-1743.
6. Kilts, T., et al. 2009. Potential roles for the small leucine-rich proteoglycans biglycan and fibromodulin in ectopic ossification of tendon induced by exercise and in modulating rotarod performance. *Scand. J. Med. Sci. Sports* 19: 536-546.

CHROMOSOMAL LOCATION

Genetic locus: PODNL1 (human) mapping to 19p13.12; Podnl1 (mouse) mapping to 8 C3.

SOURCE

PODNL1 (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PODNL1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243840 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PODNL1 (L-16) is recommended for detection of PODNL1 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).

PODNL1 (L-16) is also recommended for detection of PODNL1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PODNL1 siRNA (h): sc-97283, PODNL1 siRNA (m): sc-152363, PODNL1 shRNA Plasmid (h): sc-97283-SH, PODNL1 shRNA Plasmid (m): sc-152363-SH, PODNL1 shRNA (h) Lentiviral Particles: sc-97283-V and PODNL1 shRNA (m) Lentiviral Particles: sc-152363-V.

Molecular Weight of PODNL1 isoforms: 57/40 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) 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™ 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.