

Podocan (L-14): sc-160675

BACKGROUND

Non-collagenous proteins of the small leucine-rich repeat (SLR) protein family are considered important components of the extracellular matrix. The extracellular matrix plays an integral role in the pivotal processes of development, tissue repair and metastasis by regulating cell proliferation, differentiation, adhesion and migration. Podocan, also known as PCAN, SLRR5A or PODN, is a 613 amino acid secreted protein belonging to the small leucine-rich proteoglycan (SLRP) family and the class V subfamily. Expressed in kidney, heart, liver, pancreas and vascular smooth muscle cells, Podocan exists as 3 alternatively spliced isoforms containing 20 LRR (leucine-rich repeats), a unique N-terminal cysteine-rich cluster pattern and a highly acidic C-terminal domain. Podocan is considered a glycoprotein containing N-linked oligosaccharides that may be involved in growth regulation in cardiovascular tissues. Encoded by a gene located on human chromosome 1, Podocan interacts type I collagen (COL1).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PODN (human) mapping to 1p32.3; Podn (mouse) mapping to 4 C7.

SOURCE

Podocan (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Podocan of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-160675 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Podocan (L-14) is recommended for detection of Podocan of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Podocan (L-14) is also recommended for detection of Podocan in additional species, including equine and canine.

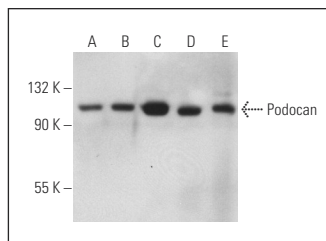
Suitable for use as control antibody for Podocan siRNA (h): sc-88314, Podocan siRNA (m): sc-152364, Podocan shRNA Plasmid (h): sc-88314-SH, Podocan shRNA Plasmid (m): sc-152364-SH, Podocan shRNA (h) Lentiviral Particles: sc-88314-V and Podocan shRNA (m) Lentiviral Particles: sc-152364-V.

Molecular Weight (predicted) of Podocan isoforms 1/2/3/4: 69/72/74/58 kDa.

Molecular Weight (observed) of glycosylated Podocan: 110 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Caki-1 cell lysate: sc-2224 or A-10 cell lysate: sc-3806.

DATA



Podocan (L-14): sc-160675. Western blot analysis of Podocan expression in Caki-1 (A), Hep G2 (B), A-10 (C) whole cell lysates and mouse kidney (D) and mouse liver (E) tissue extracts.

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 or our catalog for detailed protocols and support products.