

Podocalyxin-like 1 (H-300): sc-33138

BACKGROUND

Sialomucins are a family of cell adhesion molecules that mediate the interaction between leukocytes and endothelial cells during the inflammatory process. Podocalyxin-like protein 1 (PCLP1), a member of the sialomucin family, is a transmembrane glycoprotein and is structurally related to the L-Selectin ligand, CD34. Podocalyxin-like protein 1 encodes a 21 amino acid N-terminal signal peptide and a 26 amino acid transmembrane region. The extracellular domain contains sites for N- and O-linked glycosylation and the intracellular domain has several potential phosphorylated sites. Podocalyxin-like protein 1 is expressed on podocyte foot processes, where it maintains the glomerular filtration barrier. It is also expressed in endothelial cells as well as hemangioblasts, a precursor of hematopoietic stem cells (HSC). Subsequently, Podocalyxin-like protein 1 is thought to be an appropriate marker for hemangioblast detection.

REFERENCES

1. Lasky, L.A. 1994. Sialomucin ligands for selectins: a new family of cell adhesion molecules. Princess Takamatsu Symp. 24: 81-90.
2. Kershaw, D.B., et al. 1995. Molecular cloning, expression, and characterization of podocalyxin-like protein 1 from rabbit as a transmembrane protein of glomerular podocytes and vascular endothelium. J. Biol. Chem. 270: 29439-29446.

CHROMOSOMAL LOCATION

Genetic locus: PODXL (human) mapping to 7q32.3.

SOURCE

Podocalyxin-like 1 (H-300) is a rabbit polyclonal antibody raised against amino acids 23-322 mapping within an N-terminal extracellular domain of Podocalyxin-like 1 of human origin.

PRODUCT

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

APPLICATIONS

Podocalyxin-like 1 (H-300) is recommended for detection of Podocalyxin-like 1 of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Podocalyxin-like 1 siRNA (h): sc-44029, Podocalyxin-like 1 shRNA Plasmid (h): sc-44029-SH and Podocalyxin-like 1 shRNA (h) Lentiviral Particles: sc-44029-V.

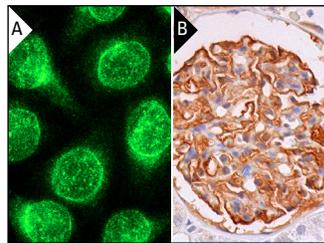
Molecular Weight of Podocalyxin-like 1: 165 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263, HeLa whole cell lysate: sc-2200 or MIA PaCa-2 cell lysate: sc-2285.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Podocalyxin-like 1 (H-300): sc-33138. Immunofluorescence staining of methanol-fixed HeLa cells membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing membrane and cytoplasmic staining of cells in glomeruli (B).

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.



Try **Podocalyxin-like 1 (3D3): sc-23904** or **Podocalyxin-like 1 (B-11): sc-393716**, our highly recommended monoclonal alternatives to Podocalyxin-like 1 (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Podocalyxin-like 1 (3D3): sc-23904**.