

Podocalyxin-like 1 (K-19): sc-10503

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. PCLP1 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. PCLP1 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, PCLP1 is thought to be an appropriate marker for hemangioblast detection.

CHROMOSOMAL LOCATION

Genetic locus: PODXL (human) mapping to 7q32.3; Podxl (mouse) mapping to 6 A3.3.

SOURCE

Podocalyxin-like 1 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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.

Blocking peptide available for competition studies, sc-10503 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Podocalyxin-like 1 (K-19) is recommended for detection of Podocalyxin-like 1 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), 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).

Podocalyxin-like 1 (K-19) is also recommended for detection of Podocalyxin-like 1 in additional species, including canine, bovine and avian.

Suitable for use as control antibody for Podocalyxin-like 1 siRNA (h): sc-44029, Podocalyxin-like 1 siRNA (m): sc-44765, Podocalyxin-like 1 shRNA Plasmid (h): sc-44029-SH, Podocalyxin-like 1 shRNA Plasmid (m): sc-44765-SH, Podocalyxin-like 1 shRNA (h) Lentiviral Particles: sc-44029-V and Podocalyxin-like 1 shRNA (m) Lentiviral Particles: sc-44765-V.

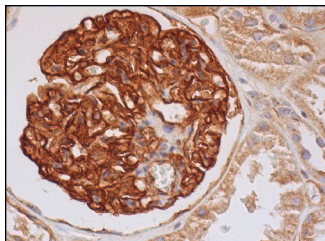
Molecular Weight of Podocalyxin-like 1: 165 kDa.

Positive Controls: ECV304 cell lysate: sc-2269, 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 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Podocalyxin-like 1 (K-19): sc-10503. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing membrane and cytoplasmic staining of cells in glomeruli and cytoplasmic staining of cells in tubules.

SELECT PRODUCT CITATIONS

1. Naishiro, Y., et al. 2005. Morphological and transcriptional responses of untransformed intestinal epithelial cells to an oncogenic β -catenin protein. *Oncogene* 24: 3141-3153.
2. Wada, T., et al. 2005. Dexamethasone prevents podocyte apoptosis induced by puromycin aminonucleoside: role of p53 and Bcl-2-related family proteins. *J. Am. Soc. Nephrol.* 16: 2615-2625.
3. Yamaguchi, T., et al. 2006. Potential selectin L ligands involved in selective recruitment of peripheral blood CD16⁺ natural killer cells into human endometrium. *Biol. Reprod.* 74: 35-40.

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.

MONOS
Satisfaction
Guaranteed

Try **Podocalyxin-like 1 (3D3): sc-23904** or **Podocalyxin-like 1 (B-11): sc-393716**, our highly recommended monoclonal alternatives to Podocalyxin-like 1 (K-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Podocalyxin-like 1 (3D3): sc-23904**.