



# podoplanin (T-20): sc-23565

## BACKGROUND

Puromycin aminonucleoside nephrosis (PAN) is a rat model for human minimal change nephropathy. During PAN, severe proteinuria is induced that is paralleled by a reduced expression of a rat podocyte protein, named podoplanin. Podoplanin, also known as Glycoprotein 38 (GP38) is a type I membrane protein. Podoplanin localizes in stromal cells of peripheral lymphoid tissue and thymic epithelial cells. As a regulator of the lymphatic endothelium, 43 kDa podoplanin probably plays a role in maintaining the unique shape of podocytes.

## REFERENCES

1. SWISS-PROT/TrEMBL (Q62011). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>
2. Schoppmann, S.F., Birner, P., Studer, P., Breiteneder-Geleff, S. 2001. Lymphatic microvessel density and lymphovascular invasion assessed by anti-podoplanin immunostaining in human breast cancer. *Anticancer Res.* 21 : 2351-2355.
3. Groger, M., Loewe, R., Holnthoner, W., Embacher, R., Pillinger, M., Herron, G.S., Wolff, K., Petzelbauer, P. 2004. IL-3 induces expression of lymphatic markers prox-1 and podoplanin in human endothelial cells. *J. Immunol.* 173: 7161-7169.
4. Nisato, R.E., Harrison, J.A., Buser, R., Orci, L., Rinsch, C., Montesano, R., Dupraz, P., Pepper, M.S. 2004. Generation and characterization of telomerase-transfected human lymphatic endothelial cells with an extended life span. *Am J Pathol.* 165: 11-24.

## SOURCE

podoplanin (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of podoplanin of rat 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-23565 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

podoplanin (T-20) is recommended for detection of podoplanin of rat 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).

Molecular Weight of podoplanin: 43 kDa.

## STORAGE

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

## 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.

## 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.