

Mouse Anti-human Podocalyxin (Cat# 101-M142, 100µg)

Podocalyxin (also known as Podocalyxin-like Protein 1/PODXL or PCLP1) is a mucin-like transmembrane sialoglycoprotein and is structurally related to the L-Selectin ligand CD34. Podocalyxin 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.

It is expressed in kidney glomerular podocytes, vascular endothelium and progenitor bone marrow. Podocalyxin has been implicated in the development of aggressive forms of cancer. It is also expressed commonly by blasts in acute lymphoblastic and myeloid leukemia. Podocalyxin has been identified as a novel cell surface marker for hemangioblasts, the common precursors of hematopoietic and endothelial cells.

Hara et al., Immunity 11, 1999; Kershaw et al., J. Biol. Chem., 1995; Kelley et al., Am J Clin Pathol., 2005; Kerosuo et al., Br J Haematol., 2004; Butta et al., BMC Mol. Biol. 7, 2006

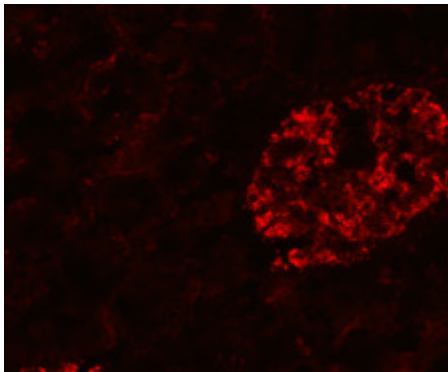


Fig. 1: Glomerular podocytes are stained with anti-human Podocalyxin.
vessels

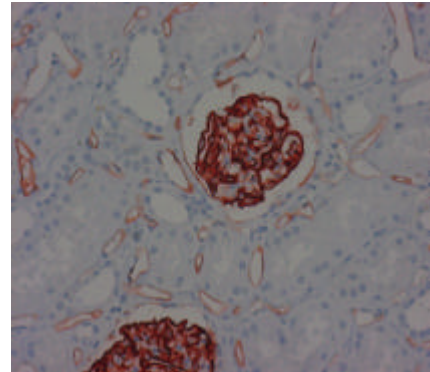


Fig. 2: Glomerular podocytes and blood are stained with anti-human Podocalyxin.

STAINING PROTOCOL for paraffin-embedded tissue-sections fixed in formalin

Anti-human Podocalyxin (#GB6D9C11)

Vectastain ABC Standard Kit
Nr. TL-125-HL

1. Deparaffinize through xylenes, ethanol, and hydrate to water.
2. Heat-Pre-treatment: in 0,1mol citrate buffer pH 6 in an Autoclave at 1 bar for 10 min
3. Cool down at room temperature for 20 min
4. Block in 3% hydrogen peroxide in PBS 10 min
5. Wash in buffer
6. Block with Avidin-block for 10 min
7. Wash
8. Block with Biotin-block for 10 min
9. Wash
10. Block with 10% normal goatserum
11. Apply Primary Antibody: **GB6D9** at a dilution 1:100 in 10% GS/PBS for 1 hour
12. Wash 4 times
13. Apply Biotinylated goat anti mouse (Vector) 1:300 and incubate for 30 min
14. Add 1 drop of A and one drop of B to 5 ml buffer, mix it and incubate 30 min
15. Wash 4 times
16. Apply the ABC- mix for 30–45 min
17. Wash 4 times
18. Incubate with ACE-Chromogen and stain for 5-10 min
19. Wash 4 times in AD
20. Counter stain with Mayer's Hämalaun for 1 min
21. Cover slip using an aqueous mounting media

The protocol was established at the Clinical Institute of Pathology, Medical University Vienna in the group of
Prof. Dr. Dentscho Kerjaschki.