

DESCRIPTION

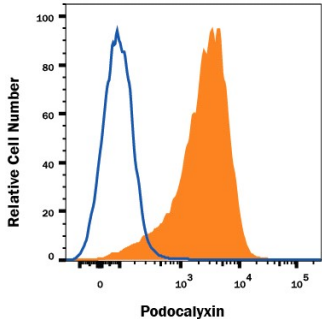
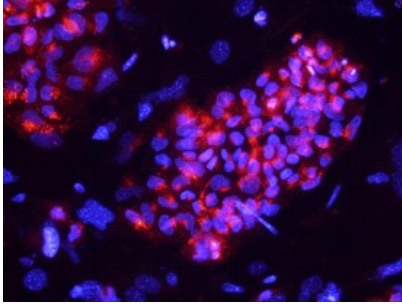
Species Reactivity	Human
Specificity	Detects human Podocalyxin in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant mouse Podocalyxin or recombinant human Endoglycan is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 222328
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Podocalyxin Ser23-Arg427 Accession # AAB61574
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human Podocalyxin
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Flow Cytometry</p>  <p>Detection of Podocalyxin in BG01V Human Cells by Flow Cytometry. BG01V human embryonic stem cells was stained with Mouse Anti-Human Podocalyxin Monoclonal Antibody (Catalog # MAB1658, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). View our protocol for Staining Membrane-associated Proteins.</p>	<p>Immunocytochemistry</p>  <p>Podocalyxin in BG01V Human Stem Cells. Podocalyxin was detected in immersion fixed BG01V human embryonic stem cells using 10 µg/mL Mouse Anti-Human Podocalyxin Monoclonal Antibody (Catalog # MAB1658) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
---	--

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Podocalyxin, also known as Podocalyxin-like protein-1 (PCLP1 or PODXL), is a type I transmembrane glycoprotein. It belongs to the CD34/Podocalyxin family of sialomucins that share structural similarity and sequence homology (1). Podocalyxin is a major sialoprotein in the podocytes of the kidney glomerulus and is also expressed by both endothelium and multipotent hematopoietic progenitors (2). It has been identified as a novel cell surface marker for hemangioblasts, the common precursors of hematopoietic and endothelial cells.

References:

1. Li, J. *et al.* (2001) *DNA Seq.* 12:407.
2. Hara, T. *et al.* (1999) *Immunity* 11:567.