

Anti-human Podocalyxin-NL557

Catalog Number: NL1658R

Lot Number: ABAV01

100 Tests in 50 μ L staining volume

20 Tests in 250 μ L staining volume

Reagents Provided

NorthernLights™ 557 (NL557)-conjugated mouse monoclonal anti-human Podocalyxin: Supplied as a 10X solution of antibody in 0.5 mL PBS containing 0.1% sodium azide.

Clone #: 222328

Isotype: mouse IgG_{2a}

Storage

Reagents are stable for **twelve months** from date of receipt when stored in the dark at 2° - 8° C.

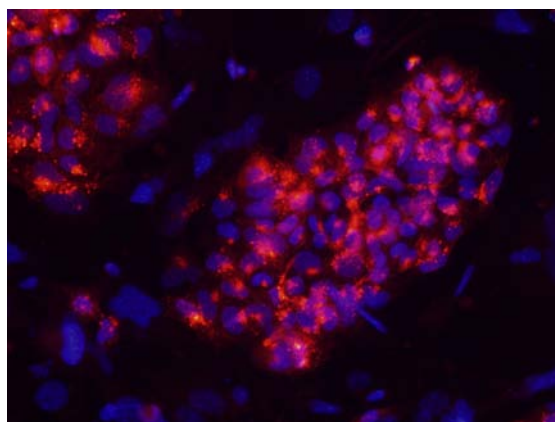
Intended Use

Designed to visualize the expression of Podocalyxin by fluorescence microscopy.

Product Description

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human Podocalyxin (rhPodocalyxin) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to fluorochrome NL557. The spectral characteristics of NL557 are provided, along with those of Rhodamine Red™-X (RRX) and Cy™3 for comparison.

Fluorochrome	Absorption Maximum (nm)	Emission Maximum (nm)
NL557	557	574
RRX	570	590
Cy3	548	562



Podocalyxin-NL557

BG01V cells grown on irradiated MEF cells were stained with NL557-conjugated anti-human Podocalyxin (Catalog # NL1658R, red) and counterstained with DAPI (blue).

Background Information

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. Podocalyxin is a major sialoprotein in the podocytes of the kidney glomerulus and is also expressed by both endothelium and multipotent hematopoietic progenitors. It has been identified as a novel cell surface marker for hemangioblasts, the common precursors of hematopoietic and endothelial cells.^{1,2}

References:

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

Immunocytochemistry Validation

This antibody has been tested for immunocytochemistry using BG01V cells grown on irradiated MEF cells. Cells were fixed in PBS containing 4% paraformaldehyde, and blocked with PBS containing 10% normal donkey serum, 0.1% Triton® X-100, and 1% BSA. After blocking, cells were incubated with NL557-conjugated antibody at a final concentration of 1X (1:10 dilution) in blocking buffer for 3 hours at room temperature, or overnight at 4° C, in the dark. Between each step, cells were washed with PBS containing BSA. If a staining volume of 250 μ L is used, this kit can be used for 20 tests; 100 tests can be done in a staining volume of 50 μ L.

Warning: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

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