

Product datasheet for AM32857PU-S

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OriGene Technologies, Inc.

PODXL Mouse Monoclonal Antibody [Clone ID: 3D3]

Product data:

Product Type: Primary Antibodies

Clone Name: 3D3

Applications: FC, IF, IHC, IP, WB

Recommended Dilution: ELISA: Use Antibody without BSA for Coating.

Western Blot: 0.5-1.0 µg/ml.

Immunoprecipitation: 1-2 μg/500 μg protein.

Flow Cytometry: $0.5-1 \mu g/106$ cells.

Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections: $0.5\text{-}1~\mu\text{g/ml}$ for

30 min at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH

6.0, for 10-20 min followed by cooling at RT for 20 minutes.

Positive Control: HeLa, Raji, Jurkat cells, Angiosarcoma, Breast, Prostate, Liver, Pancreatic,

Kidney.

Reactivity: Human, Rabbit, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Recombinant protein fragment containing the intracellular, transmembrane, and part of the

extracellular domain of Human Podocalyxin.

Specificity: The 3D3 antibody recognizes an epitope in the extracellular domain, and both the 4F10 and

2A4 antibody clones recognize epitopes in the intracellular domain of Podocalyxin.

Podocalyxin antibody can identify podocytes in the urine (podocyturia) that may indicate

glomerular disease, pre-eclampsia, and other kidney pathology.

The Podocalyxin antibody Clones 3D3 (Cat.-No AM32857PU), 4F10 and 2A4 have been extensively published in the literature and researchers are encouraged to consult the

published literature for additional information. *Cellular Localization:* Cell surface and cytoplasmic.





PODXL Mouse Monoclonal Antibody [Clone ID: 3D3] - AM32857PU-S

Formulation: 10mM PBS

State: Purified

State: Liquid purified IgG fraction from Bioreactor Concentrate

Stabilizer: 0.05% BSA

Preservative: 0.05% Sodium Azide

Concentration: lot specific

Purification: Protein A/G Chromatography

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 165-170 kDa **Gene Name:** podocalyxin like

Database Link: Entrez Gene 5420 Human

O00592

Background: Podocalyxin, also known as podocalyxin-like or PDXL, is a member of the CD34

transmembrane sialomucin family. Like other sialoglycoproteins, podocalyxin plays important roles in mediating cellular migration and cell-cell adhesion. Podocalyxin was first discovered

in podocytes, the terminally differentiated epithelial cells lining the kidney glomeruli.

Podocalyxin is expressed at high levels on the podocyte foot projections and plays essential

roles in kidney development and homeostasis, particularly blood filtration and urine

formation.

Podocalyxin is also expressed on vascular endothelia, hematopoietic progenitors and a subset of neurons (reviewed in Nielsen, 2009). Aberrant expression of podocalyxin has been described in a variety of cancers including breast, prostate, liver, pancreatic, kidney and leukemia. Human podocalyxin migrates as a 165/170 kDa doublet on SDS-PAGE; however there are many post-translational modifications which may impact its actual size (Kershaw,

1997).

Antibody to podocalyxin has been reported to be a useful biomarker for various pathological conditions. For example, podocalyxin antibody can identify podocytes in the urine, also known as podocyturia, which can be indicative of glomerular disease, pre-eclampsia, and other kidney pathology (reviewed in Chen, 2012). Additionally, podocalyxin antibody studies have indicated that highly podocalyxin-positive tumors or podocalyxin dysregulation in general can be potentially linked to more aggressive tumors and poorer outcomes (Nielson, 2009). Hence, podocalyxin antibody may be used as part of a biomarker antibody panel to

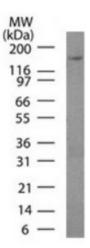
study expression of proteins associated with tumorigenesis.

Synonyms: Podocalyxin-like protein 1, PCLP, PCLP-1, GCTM-2 antigen, Hematopoietic Stem Cell

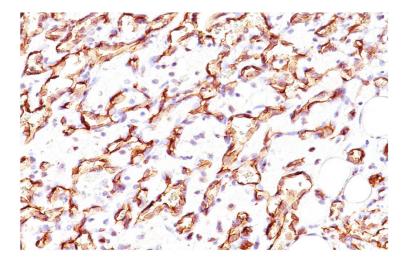
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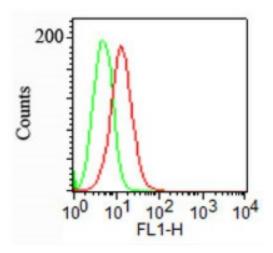
Product images:



Western blot analysis of HeLa lysate probed with Podocalyxin Antibody (Clone 3D3).



Formalin-Fixed, Paraffin-Embedded Human angiosarcoma stained with Podocalyxin Antibody (Clone 3D3).



Surface staining of NCCIT cells using Podocalyxin Antibody (Clone 3D3).