

For Research Use Only

Mouse Podocalyxin Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 87582-2-PBS



Basic Information

Catalog Number: 87582-2-PBS	GenBank Accession Number: NM_013723.3	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 27205	CloneNo.: 252967A3
Source: Rabbit	UNIPROT ID: Q9ROM4	
Isotype: IgG	Full Name: podocalyxin-like	
Immunogen Catalog Number: EG7526	Calculated MW: 53 kDa	
	Observed MW: 140-160 kDa	

Applications

Tested Applications:
WB, IHC, IF-P, Cytometric bead array, Indirect ELISA

Species Specificity:
mouse

Product Information

87582-2-PBS targets Podocalyxin as part of a matched antibody pair:

MP03126-1: 87582-3-PBS capture and 87582-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

Podocalyxin, also known as podocalyxin-like protein 1 (PODXL or PCLP1), is a transmembrane glycoprotein belonging to the CD34 family of sialomucins. Podocalyxin was originally identified as the major sialoprotein on podocytes of the kidney glomerulus but was later found to be expressed on vascular endothelial cells and early hematopoietic progenitors. It is involved in the regulation of both adhesion and cell morphology. In addition, podocalyxin is highly expressed in embryonic stem cells and aberrant expression of podocalyxin has been implicated in a wide range of cancers. Podocalyxin is a protein with a peptide bone of 55.5 kDa that undergoes a post-translational glycosylation, the different molecular mass of podocalyxin indicates the extent and variability of glycosylation patterns (PMID: 17092254).

Storage

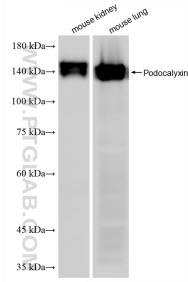
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

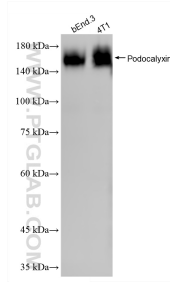
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

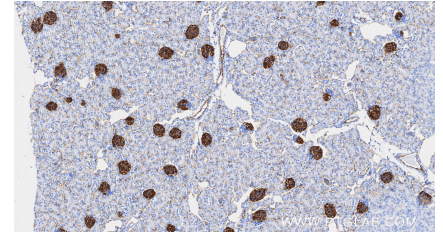
Selected Validation Data



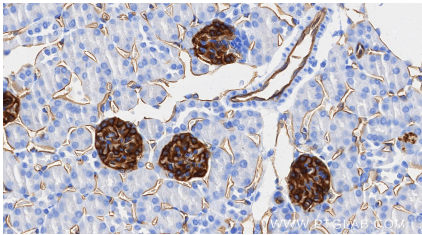
Various lysates were subjected to SDS PAGE followed by western blot with 87582-2-RR (Podocalyxin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87582-2-PBS in a different storage buffer formulation.



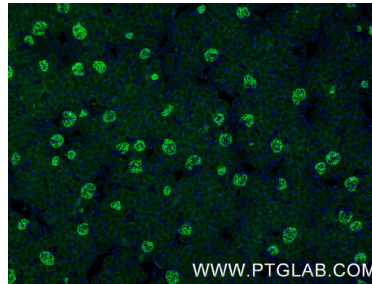
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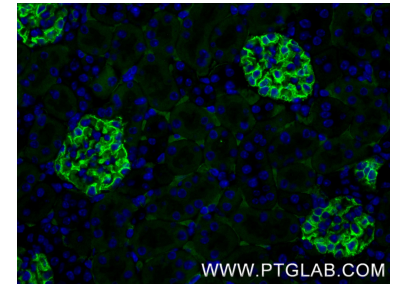
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 87582-2-RR (Podocalyxin antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 87582-2-PBS in a different storage buffer formulation.



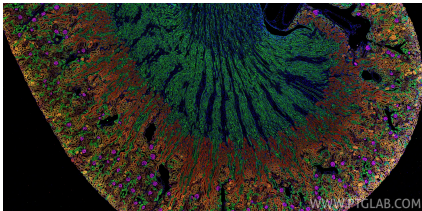
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 87582-2-RR (Podocalyxin antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 87582-2-PBS in a different storage buffer formulation.



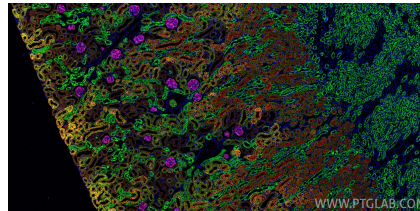
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse kidney tissue using Podocalyxin antibody (87582-2-RR, Clone: 252967A3) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 87582-2-PBS in a different storage buffer formulation.



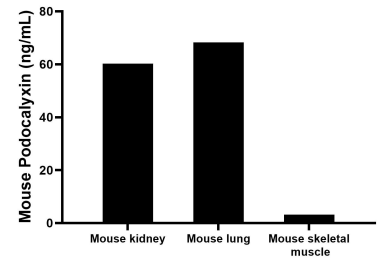
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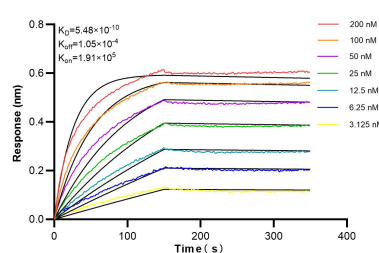
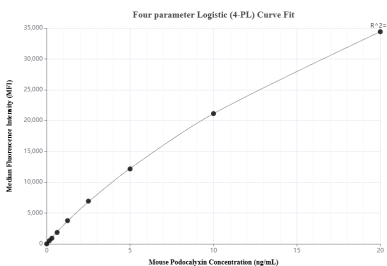
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse kidney tissue using Podocalyxin antibody (87582-2-RR, Clone: 252967A3) at dilution of 1:500 and CoraLite® 647-conjugated F(ab')₂ Fragment Goat Anti-Rabbit IgG (H+L) (SA00014-9), CoraLite® 594 ACE2 antibody (CL594-21115, red), E-cadherin antibody (60335-1-Ig, Clone: 6B11F11, green). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed



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The mean Podocalyxin concentration was determined to be 60.2 ng/mL in mouse kidney tissue extract based on a 8.4 mg/mL extract load, 68.3 ng/mL in mouse lung tissue extract based on a 5.0 mg/mL extract load, 3.2 ng/mL in mouse skeletal muscles tissue extract based on a 4.2 mg/mL extract load.



Cytometric bead array standard curve of MP03126-1, MOUSE Podocalyxin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 87582-3-PBS. Detection antibody: 87582-2-PBS. Standard: Eg7526. Range: 0.156-20 ng/mL

Biolayer interferometry (BLI) kinetic assays of 87582-2-RR against Mouse Podocalyxin were performed. The affinity constant is 0.548 nM.