

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Podocalyxin in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Podocalyxin Ser23-Arg427 Accession # AAB61574
<b>Formulation</b>	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.

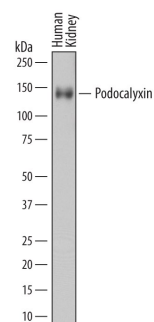
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Knockout Validated</b>	Podocalyxin/PODXL is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in Podocalyxin/PODXL knockout HeLa cell line.	

## DATA

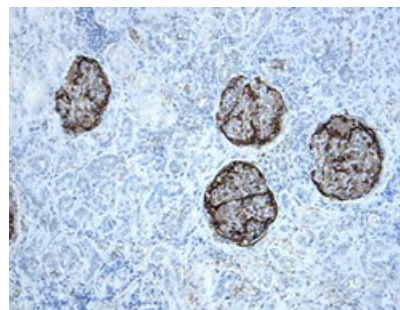
### Western Blot



#### Detection of Human Podocalyxin by Western Blot.

Western blot shows lysates of human kidney tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Podocalyxin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1658) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Podocalyxin at approximately 130 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

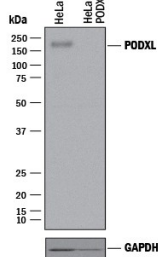
### Immunohistochemistry



#### Podocalyxin in Human Kidney.

Podocalyxin was detected in immersion fixed paraffin-embedded sections of human kidney using 5 µg/mL Goat Anti-Human Podocalyxin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1658) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to podocytes in glomeruli. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

### Knockout Validated



#### Western Blot Shows Human Podocalyxin Specificity by Using Knockout Cell Line.

Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and Podocalyxin/PODXL knockout HeLa cell line (KO). PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Podocalyxin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1658) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Podocalyxin at approximately 160 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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. 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.