

# Podoplanin Polyclonal antibody

Catalog Number: 11629-1-AP

15 Publications

## Basic Information

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| <b>Catalog Number:</b><br>11629-1-AP       | <b>GenBank Accession Number:</b><br>BC022812 | <b>Purification Method:</b><br>Antigen affinity purification         |
| <b>Size:</b><br>600 µg/ml                  | <b>GeneID (NCBI):</b><br>10630               | <b>Recommended Dilutions:</b><br>WB 1:500-1:2000<br>IHC 1:400-1:1600 |
| <b>Source:</b><br>Rabbit                   | <b>UNIPROT ID:</b><br>Q86YL7                 |  |
| <b>Isotype:</b><br>IgG                     | <b>Full Name:</b><br>podoplanin              |  |
| <b>Immunogen Catalog Number:</b><br>AG2201 | <b>Calculated MW:</b><br>17 kDa, 25 kDa      |  |
|  | <b>Observed MW:</b><br>43 kDa                |  |

## Applications

### Tested Applications:

FC, IHC, WB, ELISA

### Cited Applications:

WB, IF, IHC

### Species Specificity:

human

### Cited Species:

human, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : HEK-293 cells, human placenta tissue

IHC : human tonsillitis tissue, human appendicitis tissue

## Background Information

Podoplanin was identified as a 43 kDa glycoprotein found in the cell membranes of glomerular epithelial cells (podocyte) (PMID: 9327748). It is a lymphatic marker because the expression of podoplanin has been detected in lymphatic but not blood vascular endothelium, and is useful as the marker of tumor-associated Lymphangiogenesis. Podoplanin has a function in developing testis, most likely at the level of cell-cell interactions among pre-meiotic germ cells and immature Sertoli cells. It may be involved in cell migration and/or actin cytoskeleton organization. When expressed in keratinocytes, PDPN induces changes in cell morphology with transfected cells showing an elongated shape, numerous membrane protrusions, major reorganization of the actin cytoskeleton, increased motility and decreased cell adhesion. It is required for normal lung cell proliferation and alveolus formation at birth. PDPN induces platelet aggregation. It does not have any effect on folic acid or amino acid transport and does not function as a water channel or as a regulator of aquaporin-type water channels. The antibody is specific to Podoplanin.

## Notable Publications

| Author        | Pubmed ID | Journal      | Application |
|---------------|-----------|--------------|-------------|
| Yao Ding      | 34492084  | PLoS Pathog  | WB,IHC      |
| Wenkun Fu     | 33995679  | Theranostics | IHC         |
| Xiaomin Zhang | 24527067  | Oncol Lett   | IHC         |

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

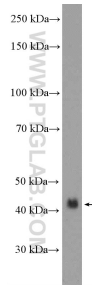
T: 4006900926

E: Proteintech-CN@ptglab.com

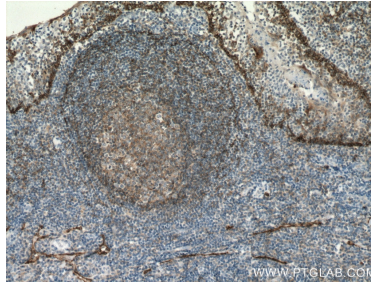
W: ptgcn.com

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

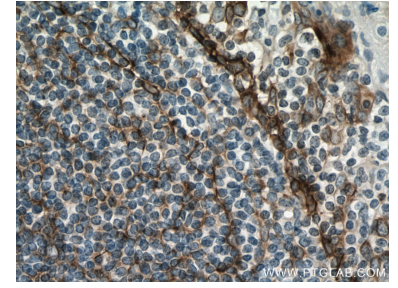
## Selected Validation Data



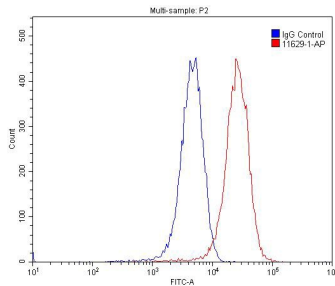
HEK-293 cells were subjected to SDS PAGE followed by western blot with 11629-1-AP (Podoplanin antibody at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 11629-1-AP (Podoplanin antibody) at dilution of 1:800 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 11629-1-AP (Podoplanin antibody) at dilution of 1:800 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> HUVEC cells were stained with 0.2ug Podoplanin antibody (11629-1-AP, red) and control antibody (blue). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500. Cells were fixed with 4% PFA and permeabilized with 0.1% Triton X-100.