

## Rabbit Anti-Podoplanin antibody

SL1048R

**Product Name** Podoplanin

**Chinese Name** 平足蛋白/淋巴管 endothelial cells 蛋白抗体

**Alias** PDPN\_HUMAN; DPN; GP36; Aggrus; Glycoprotein 36 (Gp36); PA2.26 antigen; T1-alpha; T1A; 29kDa cytosolic podoplanin intracellular domain; PICD; PSEC0003; PSEC0025;

**Research Area** Tumour Cardiovascular Cell biology immunology lymphocyte endothelial cells

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Mouse, Rat,

**Applications** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 15kDa

**Detection molecular weight** 36-40 kDa

**Cellular localization** cytoplasmic The cell membrane

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from mouse Podoplanin: 91-166/166

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed**

[PubMed](#)

This gene encodes a type-I integral membrane glycoprotein with diverse distribution in human tissues. The physiological function of this protein may be related to its mucin-type character. The homologous protein in other species has been described as a differentiation antigen and influenza-virus receptor. The specific function of this protein has not been determined but it has been proposed as a marker of lung injury. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

**Function:**

May be involved in cell migration and/or actin cytoskeleton organization. When expressed in keratinocytes, 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. Required for normal lung cell proliferation and alveolus formation at birth. Induces platelet aggregation. Does not have any effect on folic acid or amino acid transport. Does not function as a water channel or as a regulator of aquaporin-type water channels.

**Subcellular Location:**

Membrane; Single-pass type I membrane protein. Cell projection, filopodium membrane; Single-pass type I membrane protein. Cell projection, lamellipodium membrane; Single-pass type I membrane protein. Cell projection, microvillus membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Note=Localized to actin-rich microvilli and plasma membrane projections such as filopodia, lamellipodia and ruffles.

**Product Detail**

**Tissue Specificity:**

Highly expressed in placenta, lung, skeletal muscle and brain. Weakly expressed in brain, kidney and liver. In placenta, expressed on the apical plasma membrane of endothelium. In lung, expressed in alveolar epithelium. Up-regulated in colorectal tumors and expressed in 25% of early oral squamous cell carcinomas.

**Post-translational modifications:**

Extensively O-glycosylated. Contains sialic acid residues. O-glycosylation is necessary for platelet aggregation activity.  
The N-terminus is blocked.

**Similarity:**

Belongs to the podoplanin family.

**SWISS:**

Q62011

**Gene ID:**  
14726

**Database links:**

[Entrez Gene: 10630](#) Human

[Entrez Gene: 14726](#) Mouse

[Entrez Gene: 54320](#) Rat

[Omim: 608863](#) Human

[SwissProt: Q86YL7](#) Human

[SwissProt: Q62011](#) Mouse

[SwissProt: Q64294](#) Rat

[Unigene: 468675](#) Human

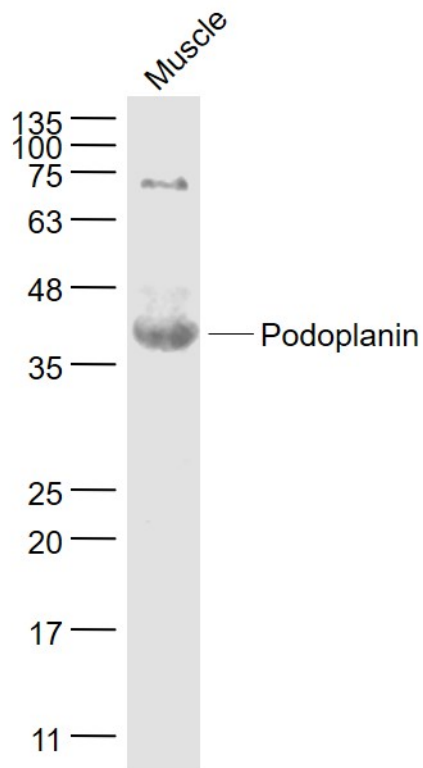
[Unigene: 2976](#) Mouse

[Unigene: 794](#) Rat

Podoplanin Protein 是一种肾小球足状突 The cell membrane 粘蛋白，目前已成为一种新的淋巴管内皮标记物蛋白，在少数小静脉上也有表达。

podoplanin Protein 是淋巴管内皮高度敏感且特异性的标记物，作为 Tumour 细胞的血小板聚集介导因子而发挥作用，能促进 Tumour 细胞迁移及增加 Tumour 细胞侵袭力。

**Product  
Picture**



Sample:

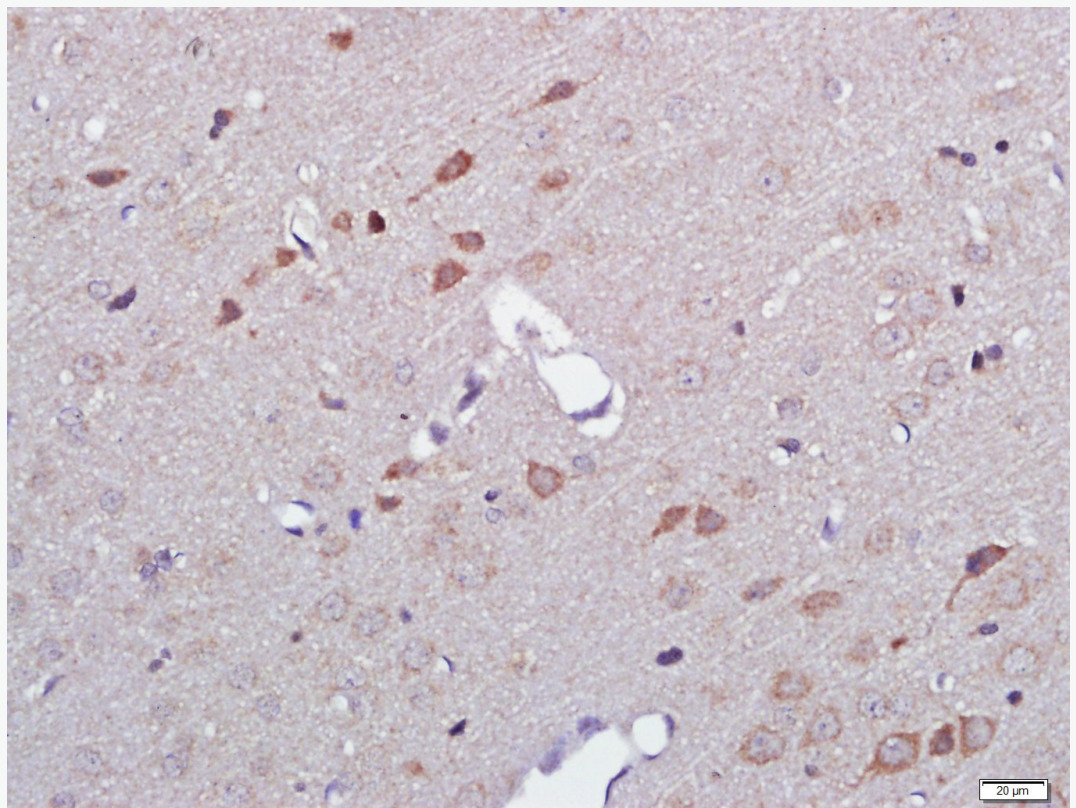
Muscle (Mouse) Lysate at 40 ug

Primary: Anti- Podoplanin (SL1048R) at 1/1000 dilution

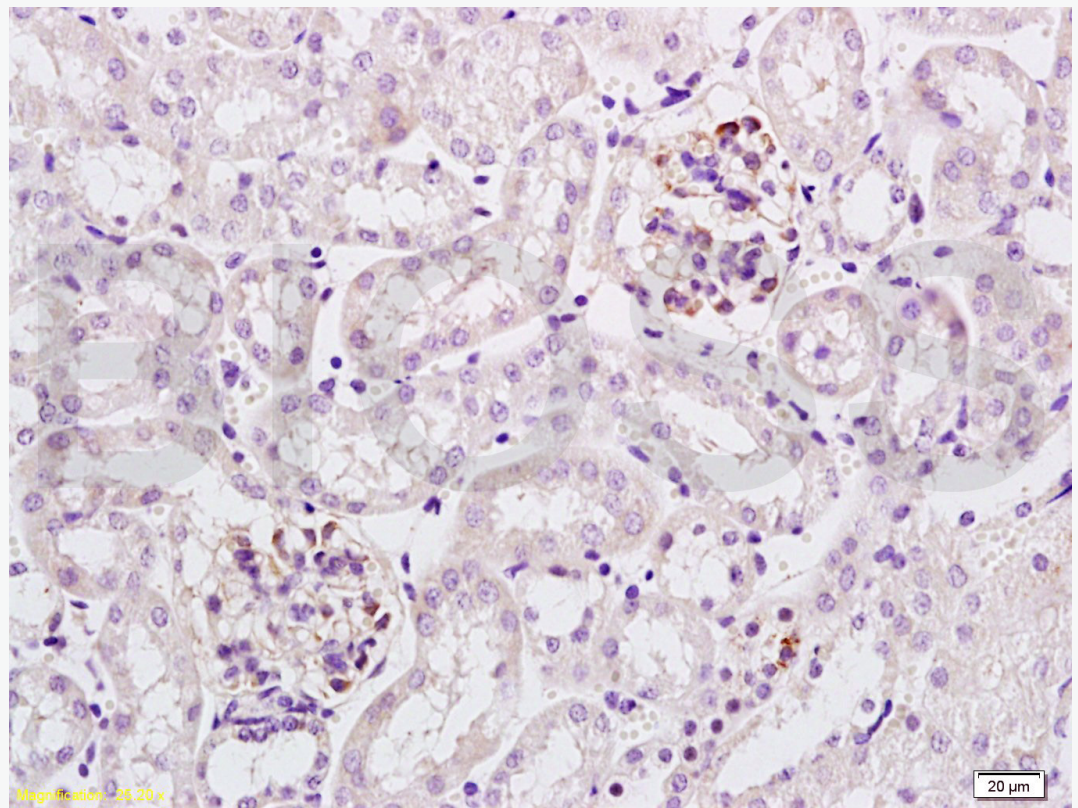
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 15 kD

Observed band size: 37 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Podoplanin) Polyclonal Antibody, Unconjugated (SL1048R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: mouse kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Podoplanin Protein/gp36 Polyclonal Antibody,

Unconjugated(SL1048R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining