

## PDPN rabbit pAb

Catalog No: YT6610

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;ELISA;IHC

Target: Podoplanin

Gene Name: PDPN GP36 PSEC0003 PSEC0025

Q86YL7

Q62011

Protein Name: PDPN

Human Gene Id: 10630

**Human Swiss Prot** 

No:

Mouse Gene Id: 14726

**Mouse Swiss Prot** 

No:

Rat Gene ld: 54320

Rat Swiss Prot No: Q64294

Immunogen: Synthesized peptide derived from human PDPN

**Specificity:** This antibody detects endogenous levels of PDPN at Human/Mouse/Rat

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 18kD

**Background :** 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:** 

caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,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.,PTM:Extensively O-glycosylated. Contains sialic acid residues. O-glycosylation is necessary for platelet aggregation

activity.,PTM:The N-terminus is blocked.,similarity:Belongs t

Subcellular Location : [Podoplanin]: Membrane; Single-pass type I membrane protein. Cell projection, lamellipodium membrane; Single-pass type I membrane protein. Cell projection, filopodium 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. Membrane raft. Apical cell membrane. Basolateral cell membrane. Cell projection, invadopodium. Localized to actin-rich microvilli and plasma membrane projections such as filopodia, lamellipodia and ruffles (By similarity). Association to the lipid rafts is required for PDPN-induced epithelial to mesenchymal transition (EMT) (PubMed:21376833). Colocalizes with CD9 in tetraspanin microdomains (PubMed:18541721). Localized at

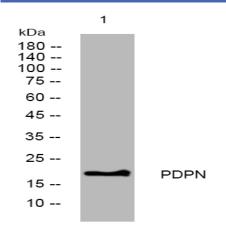
**Expression:** 

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.

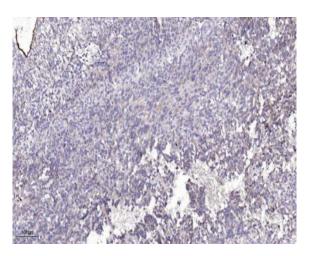
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## **Products Images**



Western blot analysis of lysates from SH-SY5Y cells, primary antibody was diluted at 1:1000, 4° over night



Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).