

Rabbit Anti-Podoplanin antibody

SL10673R

Product Name:	Podoplanin
Chinese Name:	平足蛋白/淋巴管endothelial cells蛋白抗体
Alias:	Podoplanin Protein; AGGRUS; GLYCOPROTEIN 36 KD; Podoplanin; Glycoprotein 36; gp 36; GP 38; GP 40; gp36; GP38; GP40; HT1A 1; HT1A1; hT1alpha1; hT1alpha2; Lung type I cell membrane associated glycoprotein; Lung type I cell membrane associated glycoprotein isoform a; Lung type I cell membrane associated glycoprotein T1A 2; OTS 8; OTS8; OTTHUMP00000009640; OTTHUMP00000044504; PA2.26; PA2.26 antigen; PDPN; Podoplanin; T1 alpha; T1 ALPHA GENE; T1A; TIA 2; TIA2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	15kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Podoplanin:31-130/166
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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 mucintype 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.

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:

Q86YL7

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

Important Note:

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

