

Polyclonal Anti-PDPN Antibody

Catalog Number: PA1411

Description

Gene Name	podoplanin
Recommended Protein Name	Podoplanin
Lot No.	0141112111153
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PDPN (226-238aa VVVMRKMSGRYSP).
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu	-	-

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB.

Background

Podoplanin (PDPN) is a protein that in humans is encoded by the PDPN gene. This gene encodes a type-I integral membrane glycoprotein with diverse distribution in human tissues. The International radiation Hybrid mapping consortium mapped the T1A gene to chromosome 1. It has got 162 amino acid protein which is a typical type I membrane glycoprotein, with an N-terminal signal sequence, a signal sequence cleavage site, a C-terminal hydrophobic stretch, and a short cytoplasmic tail. Northern blot analysis detected a 1.2-kb T1A2 transcript only in lung. It has been described as a differentiation antigen and influenza-virus receptor, and a marker of lung injury.

Reference

1. Zimmer G, Oeffner F, Von Messling V, Tschernig T, Groness HJ, Klenk HD, Herrler G (Sep 1999). "Cloning and characterization of gp36, a human mucin-type glycoprotein preferentially expressed in vascular endothelium". *Biochem J* 341 (Pt 2): 277–84. PMC 1220357. PMID 10393083.
2. Ma T, Yang B, Matthay MA, Verkman AS (Jul 1998). "Evidence against a role of mouse, rat, and two cloned human t1alpha isoforms as a water channel or a regulator of aquaporin-type water channels". *Am J Respir Cell Mol Biol* 19 (1): 143–9. PMID 9651190.
3. Entrez Gene: PDPN podoplanin".