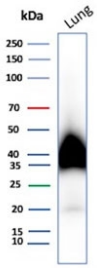
Gp36 Antibody / Glycoprotein 36 Antibody [clone PDPN/7808R] (V4700)

Catalog No.	Formulation	Size
V4700-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4700-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4700SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

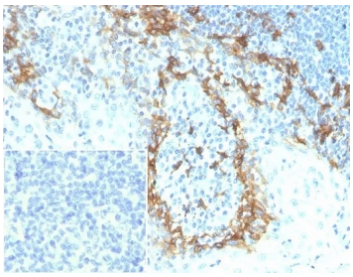
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	PDPN/7808R
Purity	Protein A/G affinity
UniProt	Q86YL7
Localization	Cell surface
Applications	ELISA (Order BSA-free format for coating) Western blot: 2-4ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Gp36 Antibody / Glycoprotein 36 Antibody is available for research use only.



Gp36 Antibody PDPN/7808R in Human Lung WB. Western blot testing of human lung tissue lysate with Gp36 Antibody / Glycoprotein 36 Antibody, clone PDPN/7808R, at 2-4 ug/ml. The predicted molecular weight of podoplanin is approximately 25 kDa, although the protein may be observed at higher molecular weights due to glycosylation. This Gp36 Antibody demonstrates detection of glycoprotein 36 in human lung tissue.



Gp36 Antibody PDPN/7808R in Human Tonsil IHC. Immunohistochemistry staining of FFPE human tonsil tissue with Gp36 Antibody / Glycoprotein 36 Antibody, clone PDPN/7808R, at 1-2 ug/ml for 30 min at RT. The inset shows PBS used in place of primary antibody as a secondary antibody negative control. HIER was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling before testing. The observed staining demonstrates podoplanin/glycoprotein 36 expression in human tonsil tissue.

Description

Gp36 Antibody / Glycoprotein 36 Antibody detects podoplanin (PDPN), a heavily glycosylated transmembrane protein historically known as glycoprotein 36 or Gp36. Podoplanin is expressed by lymphatic endothelial cells and several specialized cell populations and is widely investigated in lymphatic vascular development, cell migration and cancer biology. The mature glycoprotein is commonly observed at approximately 38-43 kDa despite a substantially lower predicted molecular weight, reflecting extensive post-translational glycosylation.

Gp36 is a type I transmembrane protein containing a heavily O-glycosylated extracellular region and short cytoplasmic tail. Although podoplanin lacks intrinsic enzymatic activity, interactions with extracellular receptors and intracellular cytoskeletal-associated proteins allow it to influence cellular morphology, adhesion and migration. PDPN also interacts with the platelet receptor CLEC-2, connecting podoplanin biology with platelet activation and mechanisms important to normal lymphatic vascular development.

Glycoprotein 36 is strongly associated with lymphatic endothelial cells and is commonly investigated as a marker of lymphatic differentiation. Podoplanin expression has also been reported in lymphangiomas, Kaposi sarcomas and subsets of angiosarcoma showing probable lymphatic differentiation. In addition, PDPN is found in stromal cells of peripheral lymphoid tissues and thymic epithelial cells, giving the protein relevance to studies extending beyond vascular endothelium.

Podoplanin is also an established target in cancer and tumor pathology research. PDPN expression has been investigated in numerous malignancies and in stromal populations within the tumor microenvironment. It is particularly well established as a sensitive marker associated with epithelioid mesothelioma and can be incorporated into antibody panels used to investigate mesothelial differentiation and distinguish mesothelioma or mesothelial cells from pulmonary carcinomas.

Clone PDPN/7808R is a recombinant rabbit monoclonal antibody generated against a recombinant human protein sequence within amino acids 1-100. It has been evaluated by Western blot and immunohistochemistry, with validation including human lung tissue lysate and FFPE human tonsil tissue. Recombinant production provides a defined antibody sequence and supports consistent performance across manufacturing lots. NSJ Bioreagents supplies antibodies for lymphatic, vascular and cancer research. A Gp36 Antibody can be used to investigate glycoprotein 36 expression, lymphatic endothelial biology, lymphangiogenesis and podoplanin-associated tumor biology.

For broader research on podoplanin expression and lymphatic endothelial biology, including a protein microarray validated reagent, see our Podoplanin Antibody / Lymphatic Endothelial Cell Marker page.

Application Notes

Optimal dilution of the Gp36 Antibody / Glycoprotein 36 Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-100) from the human protein was used as the immunogen for the Gp36 antibody.

Storage

Aliquot the Gp36 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Gp36 antibody, Glycoprotein 36 antibody, Podoplanin antibody, PDPN antibody, T1 Alpha antibody, Aggrus antibody

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