

## Mouse anti-Human Podoplanin, PE-conjugated Monoclonal Antibody | anti-PDPN antibody

Mouse Anti-Human Podoplanin

|                              |                      |                            |                                                         |
|------------------------------|----------------------|----------------------------|---------------------------------------------------------|
| CATALOG #<br><b>AAA79088</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>Flow Cytometry, Functional Assay</b> |
|------------------------------|----------------------|----------------------------|---------------------------------------------------------|

### PRODUCT SYNONYMS

Podoplanin; PE-conjugated; Monoclonal Antibody; Mouse Anti-Human Podoplanin; Anti-human Podoplanin-PE (#18H5); Glycoprotein 36; GP36; T1-alpha; PA2.26 antigen; anti-PDPN antibody

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Mouse                                                                                                                                                                                                                                                                                              |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                                              |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                                         |
| Isotype                                        | IgG1                                                                                                                                                                                                                                                                                               |
| Clone Number                                   | 18H5 / IgG1                                                                                                                                                                                                                                                                                        |
| Specificity                                    | The unconjugated monoclonal antibody will detect native human Podoplanin in WB and on the surface of human LEC.                                                                                                                                                                                    |
| Purity/Purification                            | Protein G purified                                                                                                                                                                                                                                                                                 |
| Form/Format                                    | Liquid                                                                                                                                                                                                                                                                                             |
| Concentration                                  | 200 ug/ml (varies by lot)                                                                                                                                                                                                                                                                          |
| Sequence Length                                | 120                                                                                                                                                                                                                                                                                                |
| Applicable Applications for anti-PDPN antibody | FCM/FACS (Flow Cytometry)                                                                                                                                                                                                                                                                          |
| Immunogen                                      | MDCK cells stably expressing gp36 (Podoplanin) protein                                                                                                                                                                                                                                             |
| Conjugation                                    | PE                                                                                                                                                                                                                                                                                                 |
| Preparation                                    | Monoclonal antibodies were produced with the help of BALB/c mice using MDCK cells stably expressing gp36 (Podoplanin) protein as the immunizing antigen.                                                                                                                                           |
| Buffer/Stabilizer                              | PBS; 1 % BSA                                                                                                                                                                                                                                                                                       |
| Preservative                                   | 0,02 % sodium azide                                                                                                                                                                                                                                                                                |
| Warnings                                       | Reagents contains sodium azide. Under acidic conditions sodium azide yield hydrazoic acid, this is extremely toxic. Acide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive condition may develop. |
| Preparation and Storage                        | Store protected from light at 2-8°C. DO NOT FREEZE!                                                                                                                                                                                                                                                |

IMAGES



FCM/FACS (Flow Cytometry)  
FACS analysis with primary human dermal lymphatic endothelial cells (HDLEC).

ADDITIONAL INFORMATION

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|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-PDPN antibody | Podoplanin, also known as glycoprotein 36 (gp36), PA2.26 antigen, T1alpha (T1A), and aggrus, is a 36 kDa type I transmembrane sialoglycoprotein and member of the Podoplanin family. Podoplanin has three potential splice variants, the longest of which is represented by a 238 amino acid (aa) precursor (NP_006465). It contains an undefined signal sequence, a 22 aa transmembrane segment (aa 207228) and a short cytoplasmic tail (aa 229-238). The ECD contains abundant Ser/Thr residues that could serve as potential Olinked glycosylation sites. The cytoplasmic tail contains putative sites for protein kinase C phosphorylation. There are two potential alternate start sites at Met 77 (Swiss Prot #: Q86YL7) and Met 119 (EAW51692) that generate short forms. The 162 aa short form Podoplanin precursor shares 47% aa identity with mouse Podoplanin. Podoplanin is expressed on glomerular epithelial cells (podocytes), type I lung alveolar cells, lymphatic endothelial cells, and numerous tumors, including colorectal tumors, squamous cell carcinomas, testicular seminoma, and brain tumors. One study shows high expression of Podoplanin mRNA in placenta, lung, skeletal muscle, and heart, and weaker levels in brain, kidney, and liver. Podoplanin is the ligand for Ctype lectin-like receptor 2 (CLEC2). Their association is dependent on sialic acid on Oglycans of Podoplanin. Through its association with CLEC2, Podoplanin-induces platelet aggregation and tumor metastasis. Podoplanin is also necessary for lymphatic vessel formation, normal lung cell proliferation and alveolus formation at birth. |
| References                                         | 1. Breiteneder-Geleff et al, Am J Pathol 154:385, 1999 2. Kerjaschki et al, Nature Med 12:230, 2006 3. Kriehuber et al, J Exp Med 194:797, 2001 4. Zimmer. et al, Biochem J 341:277, 1999 5. Kato et al, Tumour Biol 26:195, 2005 6. Katsue-Inoue et al, J Biol Chem 282:25993, 2007 7. Kato et al, Oncogene 23:8552, 2004 8. Schacht. et al, Am J Pathol 166:913, 2005 9. Mishima et al, Acta Neuropathol 111:483, 2006                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                  |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 54792060                                                                                                                                                                                                         |
| NCBI GeneID                      | 10630                                                                                                                                                                                                            |
| NCBI Accession #                 | NP_001006625.1                                                                                                                                                                                                   |
| NCBI GenBank Nucleotide #        | NM_001006624.1                                                                                                                                                                                                   |
| UniProt Accession #              | Q86YL7; O60836; O95128; Q7L375; Q8NBQ8; Q8NBR3; A9Z1Y2; B2R6J8; E9PB68; F6QWX5                                                                                                                                   |
| NCBI Official Full Name          | podoplanin isoform c                                                                                                                                                                                             |
| NCBI Official Synonym Full Names | podoplanin                                                                                                                                                                                                       |
| NCBI Official Symbol             | PDPN                                                                                                                                                                                                             |
| NCBI Official Synonym Symbols    | T1A; GP36; GP40; Gp38; OTS8; T1A2; T11A; T1A-2; AGGRUS; HT1A-1; PA2.26                                                                                                                                           |
| NCBI Protein Information         | podoplanin; T1-alpha; hT1alpha-1; hT1alpha-2; PA2.26 antigen; glycoprotein 36; glycoprotein, 36-KD; lung type I cell membrane associated glycoprotein; lung type-I cell membrane-associated glycoprotein (T1A-2) |
| UniProt Protein Name             | Podoplanin                                                                                                                                                                                                       |
| UniProt Gene Name                | PDPN                                                                                                                                                                                                             |
| UniProt Synonym Gene Names       | GP36; Gp36; T1A                                                                                                                                                                                                  |
| UniProt Entry Name               | PDPN_HUMAN                                                                                                                                                                                                       |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/podoplanin-pe-conjugated-antibody-clone-18h5-igg1-flow-cytometry-elisa/79088>