

Mouse Anti-Human Podoplanin

ORDERING INFORMATION

Catalog Number:	101-M40
Size:	100 µg
Formulation:	Monoclonal Antibody; Lyophilized
Uniport:	Q86YL7
Antigen:	gp36 (Podoplanin)-expressing MDCK cells
Application:	WB, IHC, IF, FC
Stabilizer:	None
Buffer:	PBS pH 7.4 w/o preservative

Description:

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 207-228) and a short cytoplasmic tail (aa 229-238). The ECD contains abundant Ser/Thr residues that could serve as potential O-linked 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 C-type lectin-like receptor 2 (CLEC2). Their association is dependent on sialic acid on O-glycans 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.

Reconstitution:

Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.

Stability:

The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8 °C. Frozen aliquots are stable for at least 6 months when stored at -20 °C. **Avoid repeated freeze-thaw cycles!**

Optimal dilutions should be determined by each laboratory for each application.

The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users!

This product is sold for Research Use Only !