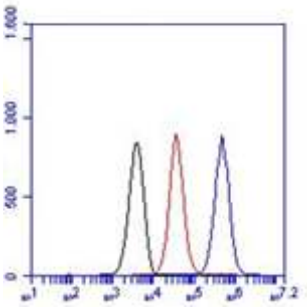
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Podoplanin, Human, clone LpMab17		
Catalog number	HM2375-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #		1	1	1,2		1		1
Yes		●	●	●		●		●
No								
N.D.	●				●		●	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: Flow cytometry experiment with MG-63 cells. Black line represent the cells only, red line the isotype control and blue line HM2375 in a concentration of 1 µg/250000 cells.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- IA: Antibody LpMab17 can be used as detection antibody.
- FC: HM2375 can be used both intra- and extracellular.
- W: reduced and non-reduced conditions were used. The expected band sizes are ~40 kDa.

General Information

Description

Monoclonal antibody LpMab17 recognizes human Podoplanin (PDPN; agrrus). Podoplanin is a small type_I transmembrane sialoglycoprotein expressed on a broad range of cell types and involved in platelet aggregation and tumor metastasis. The 36 kDa protein was initially identified as a biomarker of lympatic endothelium, alveolar epithelium and glomerular podocytes. Expression has also been found in many tumors. However the functional role of PDPN is still poorly understood. Podoplanin consists of an extracellular domain, transmembrane domain and a cytoplasmic tail. In its extracellular domain it possesses a platelet aggregation stimulating (PLAG) domain. Podoplanin has got three PLAG domains of which PLAG3 is critical for binding with C-type lectin receptor-2 (CLEC-2). This PDPN specific receptor mediates platelet aggregation. This interaction is required to initiate and maintain separation of blood and lymphatic vessels and can be critical in process of cancer metastasis. This may lead to PDPN as possible therapeutic target. Antibody LpMab-17 recognizes a non-PLAg domain (Gly77-Asp82). Although PDPN is quite conserved between species, LpMab17 does not bind monkey PDPN.

Immunogen

LN229/hPDPN (Ref.1)

Aliases	Aggrus, Glycoprotein 36, Gp36, PA2.26 antigen, T1-alpha, T1A
Gene	Gene name: PDPN Entrez Gene ID: 10630 Uniprot: Q86YL7
References	1. Kato, Y et al; LpMab-12 Established by CasMab Technology Specifically Detects Sialylated *O*-Glycan on Thr52 of Platelet Aggregation-Stimulating Domain of Human Podoplanin. PlosOne 2016, *11*: e0152912 2. Kaneko, M et al; Development and characterization of anti-glycopeptide monoclonal antibodies against human podoplanin, using glycan-deficient cell lines generated by CRISPR/Cas9 and TALEN. Cancer Medicine 2017, *6*:382
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC	Date
Brenda Teunissen	28/12/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.