

Product datasheet

Anti-LMAN1 antibody [EPR6979] ab125006

KO **VALIDATED** Recombinant RabMAb

★★★★★ [4 Abreviews](#) [14 References](#) [8 Images](#)

Overview

| | |
|----------------------------|--|
| Product name | Anti-LMAN1 antibody [EPR6979] |
| Description | Rabbit monoclonal [EPR6979] to LMAN1 |
| Host species | Rabbit |
| Tested applications | Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide within Human LMAN1 aa 1-100. The exact sequence is proprietary. Database link: P49257 |
| Positive control | WB: Jurkat, HEK-293T and HeLa cell lysates; Mouse and Rat spleen and heart lysates; ICC/IF: 293T cells; IHC-P: Human, rat, and mouse kidney tissue sections. Flow Cyt (intra): HeLa cells. |
| General notes | This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR6979 |

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab125006 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|------------------|-----------|---|
| Flow Cyt (Intra) | | Use at an assay dependent concentration. |
| WB | ★★★★★ (1) | 1/1000 - 1/10000. Detects a band of approximately 53 kDa (predicted molecular weight: 58 kDa). |
| IHC-P | | 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols . Heat up to 98°C, below boiling, and then let cool for 10-20 min. For unpurified use at 1/100 - 1/250. |
| ICC/IF | ★★★★★ (3) | 1/50 - 1/100. |

Target

Function

Mannose-specific lectin. May recognize sugar residues of glycoproteins, glycolipids, or glycosylphosphatidyl inositol anchors and may be involved in the sorting or recycling of proteins, lipids, or both. The LMAN1-MCFD2 complex forms a specific cargo receptor for the ER-to-Golgi transport of selected proteins.

Tissue specificity

Ubiquitous.

Involvement in disease

Defects in LMAN1 are THE cause of factor V and factor VIII combined deficiency type 1 (F5F8D1) [MIM:227300]; also known as multiple coagulation factor deficiency I (MCFD1). F5F8D1 is an autosomal recessive blood coagulation disorder characterized by bleeding symptoms similar to those in hemophilia or parahemophilia, that are caused by single deficiency of FV or FVIII, respectively. The most common symptoms are epistaxis, menorrhagia, and excessive bleeding during or after trauma. Plasma levels of coagulation factors V and VIII are in the range of 5 to 30% of normal.

Sequence similarities

Contains 1 L-type lectin-like domain.

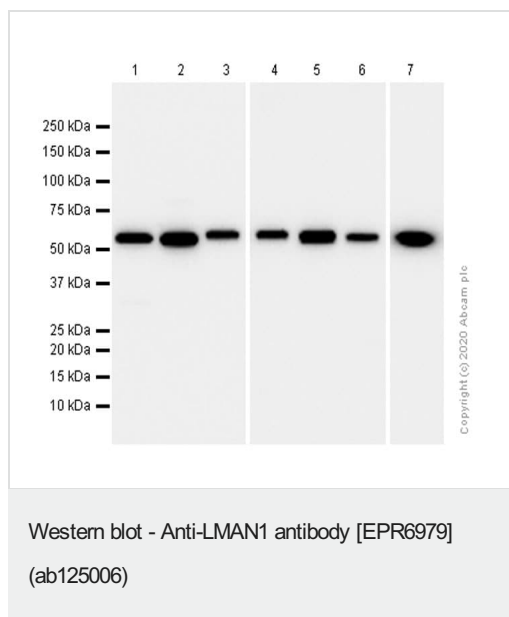
Post-translational modifications

The N-terminal may be partly blocked.

Cellular localization

Endoplasmic reticulum-Golgi intermediate compartment membrane. Golgi apparatus membrane. Endoplasmic reticulum membrane.

Images



All lanes : Anti-LMAN1 antibody [EPR6979] (ab125006) at 1/1000 dilution

Lane 1 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate

Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 3 : Mouse spleen lysate

Lane 4 : Mouse heart lysate

Lane 5 : Rat spleen lysate

Lane 6 : Rat heart lysate

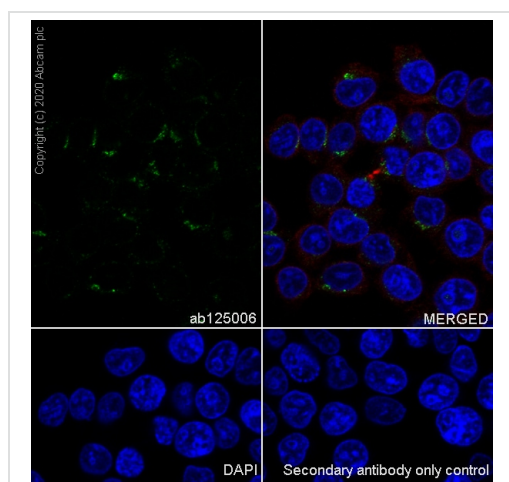
Lane 7 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

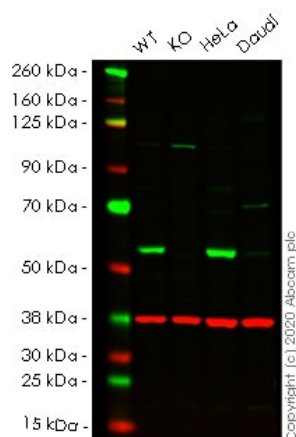
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 58 kDa



Immunocytochemistry/ Immunofluorescence - Anti-LMAN1 antibody [EPR6979] (ab125006)

Immunocytochemistry analysis of 293T (Human embryonic kidney epithelial cell) cells labeling LMAN1 with Purified ab125006 at 1/50 dilution (2 µg/mL). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 dilution (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 dilution (2 µg/mL). DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-LMAN1 antibody [EPR6979]
(ab125006)

All lanes : Anti-LMAN1 antibody [EPR6979] (ab125006) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate

Lane 2 : LMAN1 knockout HEK-293T cell lysate

Lane 3 : HeLa cell lysate

Lane 4 : Daudi cell lysate

Lysates/proteins at 20 µg per lane.

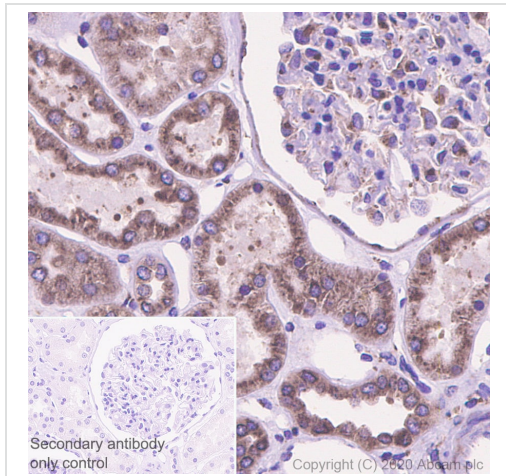
Performed under reducing conditions.

Predicted band size: 58 kDa

Observed band size: 55 kDa

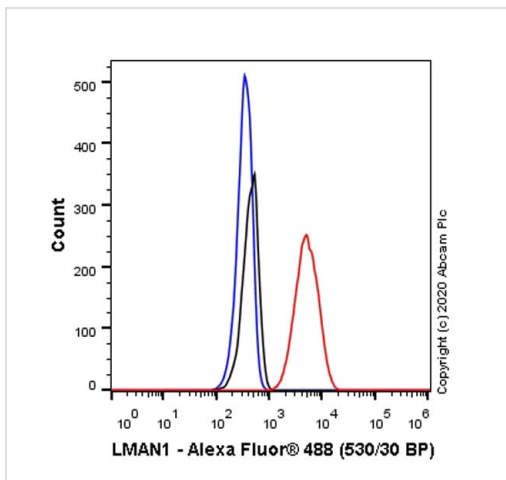
Lanes 1-4: Merged signal (red and green). Green - ab125006 observed at 55 kDa. Red - loading control **ab8245** observed at 37 kDa.

ab125006 Anti-LMAN1 antibody [EPR6979] was shown to specifically react with Protein ERGIC-53 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line **ab266248** (knockout cell lysate **ab257505**) was used. Wild-type and Protein ERGIC-53 knockout samples were subjected to SDS-PAGE. ab125006 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 Dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



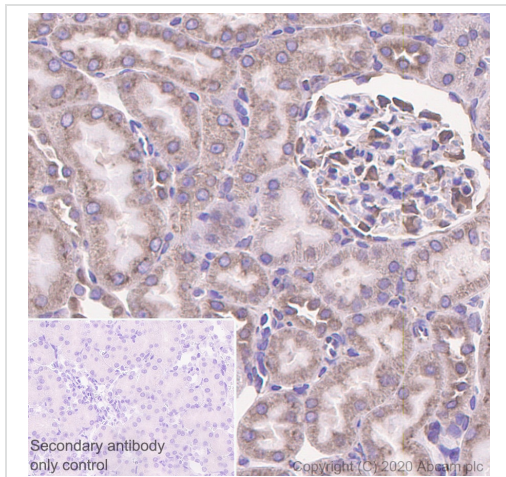
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling LMAN1 with Purified ab125006 at 1/500 dilution (0.21 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LMAN1 antibody
[EPR6979] (ab125006)



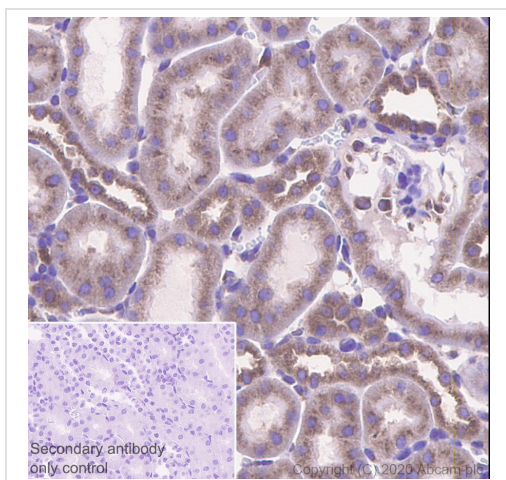
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling LMAN1 with Purified ab125006 at 1/20 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

Flow Cytometry (Intracellular) - Anti-LMAN1 antibody
[EPR6979] (ab125006)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LMAN1 antibody [EPR6979] (ab125006)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling LMAN1 with Purified ab125006 at 1/500 dilution (0.21 $\mu\text{g/mL}$). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LMAN1 antibody [EPR6979] (ab125006)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling LMAN1 with Purified ab125006 at 1/500 dilution (0.21 $\mu\text{g/mL}$). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-LMAN1 antibody [EPR6979] (ab125006)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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