abcam

Product datasheet

Anti-LMAN1 antibody [OTI1B8] ab118407

KO VALIDATED

1 References 4 Images

Overview

Product name Anti-LMAN1 antibody [OTI1B8]

Description Mouse monoclonal [OTI1B8] to LMAN1

Host species Mouse

Tested applications Suitable for: WB

Species reactivity Reacts with: Rat, Dog, Human, African green monkey

Immunogen Recombinant full length protein corresponding to Human LMAN1. Produced in HEK-293T cells

(NP 005561).

Database link: P49257

Positive control WB: HEK-293T cell lysate transfected with pCMV6-ENTRY LMAN1 cDNA; HEK-293T, Daudi,

A549, COS-7, HeLa, HepG2, HT-29, Jurkat, MCF7, MDCK and PC-12 cell extracts.

General notes Clone OTI1B8 (formerly 1B8).

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

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.

Avoid freeze / thaw cycle.

Storage buffer pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol, 1% BSA

Purity Affinity purified

Purification notes Purified from cell culture supernatant by affinity chromatography..

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ClonalityMonoclonalClone numberOTI1B8IsotypeIgG1

Applications

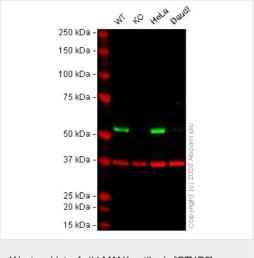
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab118407 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/200 - 1/500. Predicted molecular weight: 58 kDa.

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



Western blot - Anti-LMAN1 antibody [OTI1B8] (ab118407)

All lanes : Anti-LMAN1 antibody [OTI1B8] (ab118407) at 1/200 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

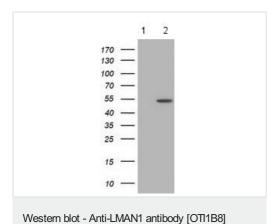
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 58 kDa **Observed band size:** 55 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab118407 observed at 55 kDa. Red - loading control <u>ab181602</u> (Rabbit Anti-GAPDH antibody [EPR16891]) observed at 37kDa.

ab118407 was shown to react with LMAN1 in wild-type HEK-293T cells in western blot with loss of signal observed in LMAN1 knockout cell line ab266248 (LMAN1 knockout cell lysate ab257505). Wild-type and LMAN1 knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab118407 and ab181602 (Rabbit Anti-GAPDH antibody [EPR16891]) overnight at 4°C at a 1 in 200 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (ab216777) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



(ab118407)

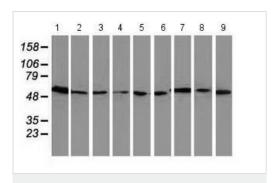
All lanes : Anti-LMAN1 antibody [OTI1B8] (ab118407) at 1/200 dilution

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate transfected with pCMV6-ENTRY control cDNA

Lane 2: HEK-293T cell lysate transfected with pCMV6-ENTRY LMAN1 cDNA

Lysates/proteins at 5 µg per lane.

Predicted band size: 58 kDa



Western blot - Anti-LMAN1 antibody [OTI1B8] (ab118407)

All lanes : Anti-LMAN1 antibody [OTI1B8] (ab118407) at 1/200 dilution

Lane 1 : HepG2 (human liver hepatocellular carcinoma cell line) cell extract

Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell extract

Lane 3: HT29 (human colorectal adenocarcinoma cell line) cell extract

Lane 4: A549 (human lung carcinoma cell line) cell extract

Lane 5 : COS-7 (african green monkey kidney fibroblast-like cell line) cell extract

Lane 6 : Jurkat (human T cell leukemia cell line from peripheral blood) cell extract

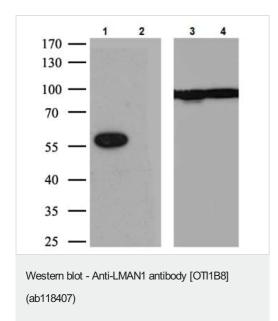
Lane 7: MDCK (canine kidney cell line) cell extract

Lane 8 : PC-12 (rat adrenal gland pheochromocytoma cell line) cell extract

Lane 9 : MCF7 (human breast adenocarcinoma cell line) cell extract

Lysates/proteins at 35 µg per lane.

Predicted band size: 58 kDa



Lanes 1-2: Anti-LMAN1 antibody [OTI1B8] (ab118407) at 1/1000 dilution

Lanes 3-4: anti-HSP90AB1

Lanes 1 & 3 : Wild-type HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate

Lanes 2 & 4: LMAN1-knockout HEK-293T cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 58 kDa

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