

Product Name: KD-Validated LMAN1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01172**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 57.5kDa

Antigen Information

Gene Name	LMAN1 LMAN1; Lectin, Mannose Binding; ERGIC53; ERGIC-53; MCFD1; FMFD1; F5F8D; MR60; Gp58; Endoplasmic Reticulum-Golgi Intermediate Compartment Protein; ER-Golgi Intermediate
Alternative Names	Compartment 53 KDa Protein; Intracellular Mannose-Specific Lectin MR60; Protein ERGIC-53; Coagulation Factor V-Factor VIII Combined Deficiency; Lectin, Mannose-Binding; Lectin Mannose-Binding; GP58
Gene ID	3998.0
SwissProt ID	P49257
Immunogen	A synthesized peptide derived from human LMAN1

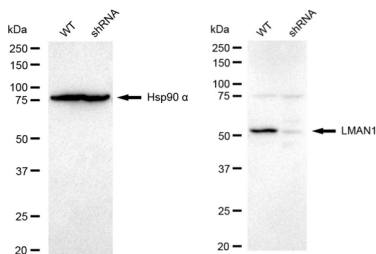
Background

The protein encoded by this gene is a membrane mannose-specific lectin that cycles between the endoplasmic reticulum, endoplasmic reticulum-Golgi intermediate compartment, and cis-Golgi, functioning as a cargo receptor for glycoprotein transport. The protein has an N-terminal signal sequence, a calcium-dependent and pH-sensitive carbohydrate recognition domain, a stalk region that functions in oligomerization, a transmembrane domain, and a short cytoplasmic domain required for organelle targeting. Allelic variants of this gene are associated with the autosomal recessive disorder combined factor V-factor VIII deficiency. [provided by RefSeq, Jul 2015]

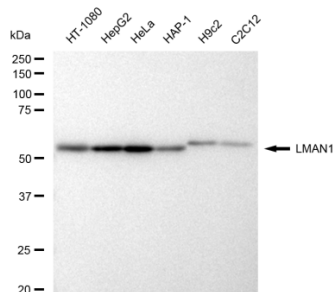
Research Area

Signal Transduction

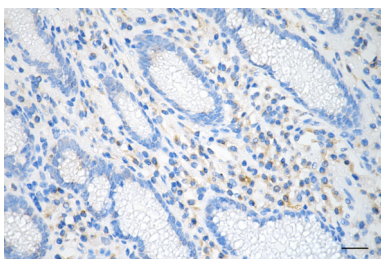
Image Data



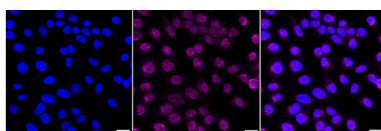
Western blotting analysis using LMAN1 antibody (KVA01172). LMAN1 expression in wild type (WT) and LMAN1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with LMAN1 antibody (KVA01172, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



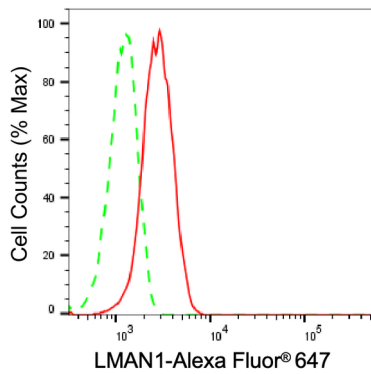
Western blotting analysis using LMAN1 antibody (KVA01172). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with LMAN1 antibody (KVA01172, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human gastric carcinoma using LMAN1 antibody (KVA01172, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with LMAN1 antibody (KVA01172, 1:1,000). Nuclei were stained blue with DAPI; LMAN1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of LMAN1 expression in HepG2 cells using LMAN1 antibody (KVAb01172, 1:2,000). Green, isotype control; red, LMAN1.