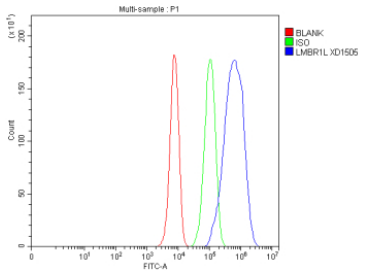
LMBR1L Antibody / Limb region 1 like protein (FY12141)

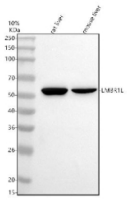
Catalog No.	Formulation	Size
FY12141	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q6UX01
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This LMBR1L antibody is available for research use only.



Flow Cytometry analysis of HepG2 cells using anti-LMBR1L antibody. Overlay histogram showing HepG2 cells stained with (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-LMBR1L antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Western blot analysis of LMBR1L using anti-LMBR1L antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: rat liver tissue lysates, Lane 2: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-LMBR1L antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. A specific band was detected for LMBR1L at approximately 57 kDa. The expected band size for LMBR1L is at 57 kDa.

Description

LMBR1L antibody detects Limb region 1 like protein, encoded by the LMBR1L gene on chromosome 6q13. LMBR1L antibody is used to study this poorly characterized transmembrane protein, which is homologous to LMBR1. LMBR1L belongs to a family of proteins containing multiple transmembrane helices and putative sterol-sensing or lipid-binding domains. Although its precise biological function remains under investigation, LMBR1L is thought to contribute to membrane trafficking, vesicular transport, and immune regulation. Expression analyses demonstrate that LMBR1L is broadly expressed, with enrichment in hematopoietic tissues and immune cells.

Structurally, LMBR1L is predicted to contain 9 transmembrane segments and luminal loops that may bind sterols or interact with lipid-regulatory proteins. Its cytoplasmic regions contain motifs potentially involved in adaptor binding and vesicle sorting. Evolutionary conservation across vertebrates suggests an important but as yet undefined role. Related proteins such as LMBR1 are linked to limb development and Hedgehog signaling, raising interest in whether LMBR1L contributes to developmental or signaling pathways.

Functionally, emerging evidence implicates LMBR1L in immune regulation. Genome-wide association studies have associated polymorphisms in LMBR1L with autoimmune diseases, including systemic lupus erythematosus. Experimental knockdown in immune cells alters cytokine secretion and receptor trafficking, suggesting LMBR1L modulates signaling at the plasma membrane or endosomal compartments. Although mechanisms are not fully resolved, researchers use LMBR1L antibody to probe its localization, expression, and interactions in immune and developmental contexts.

Dysregulation of LMBR1L expression may contribute to disease susceptibility. Variants in LMBR1L have been associated with altered immune tolerance and increased risk of autoimmunity. Aberrant expression has also been observed in hematological malignancies, although its role in cancer biology requires further clarification. Understanding LMBR1L may provide new insights into membrane protein regulation, immunity, and human disease. NSJ Bioreagents provides LMBR1L antibody for researchers investigating this understudied membrane protein.

Experimentally, LMBR1L antibody is used in western blotting to detect the ~52 kDa protein, in flow cytometry to measure immune cell surface expression, and in immunohistochemistry to evaluate expression in tissues. Immunoprecipitation with LMBR1L antibody helps identify potential binding partners involved in vesicle trafficking. These approaches facilitate characterization of a protein whose function remains to be fully defined.

Application Notes

Optimal dilution of the LMBR1L antibody should be determined by the researcher.

Immunogen

E.coli-derived human LMBR1L recombinant protein (Position: M1-Q489) was used as the immunogen for the LMBR1L antibody.

Storage

After reconstitution, the LMBR1L antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.