

A24690

Leader in Biomolecular Solutions for Life Science



Megalin/LRP2 Rabbit mAb

Catalog No.: A24690

Recombinant

Basic Information

Observed MW

250kDa+

Calculated MW

522kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-P,ELISA,IF-P,FC (intra)

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

ARC63830

Recommended Dilutions

WB	1:500 - 1:1000
IF-P	1:50 - 1:200
IHC-P	1:50 - 1:200
FC (intra)	1:100 - 1:500
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Contact

 www.abclonal.com

Background

The protein encoded by this gene, low density lipoprotein-related protein 2 (LRP2) or megalin, is a multi-ligand endocytic receptor that is expressed in many different tissues but primarily in absorptive epithelial tissues such as the kidney. This glycoprotein has a large amino-terminal extracellular domain, a single transmembrane domain, and a short carboxy-terminal cytoplasmic tail. The extracellular ligand-binding-domains bind diverse macromolecules including albumin, apolipoproteins B and E, and lipoprotein lipase. The LRP2 protein is critical for the reuptake of numerous ligands, including lipoproteins, sterols, vitamin-binding proteins, and hormones. This protein also has a role in cell-signaling; extracellular ligands include parathyroid hormones and the morphogen sonic hedgehog while cytosolic ligands include MAP kinase scaffold proteins and JNK interacting proteins. Recycling of this membrane receptor is regulated by phosphorylation of its cytoplasmic domain. Mutations in this gene cause Donnai-Barrow syndrome (DBS) and facio-oculoacoustico-renal syndrome (FOAR).

Immunogen Information

Gene ID	Swiss Prot
4036	P98164

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

DBS; GP330; LRP-2; Megalin/LRP2

Product Information

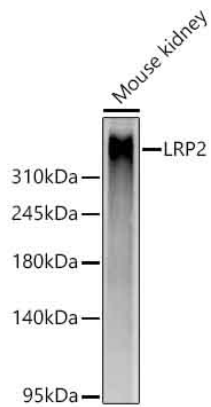
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

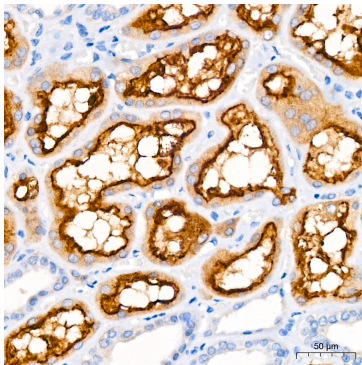
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

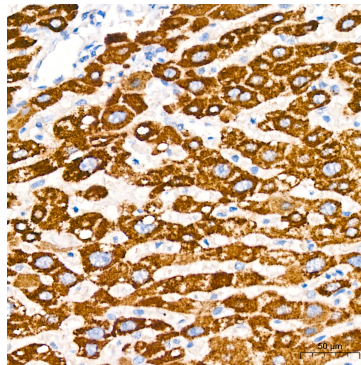
Validation Data



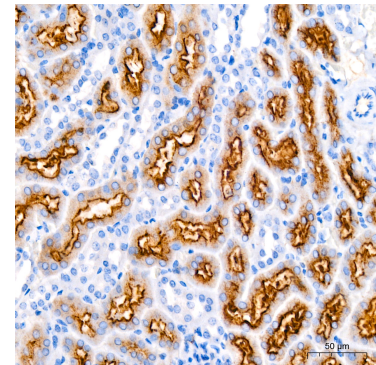
Western blot analysis of lysates from Mouse kidney using Megalin/LRP2 Rabbit mAb (A24690) at 1:1000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25 µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 20s.



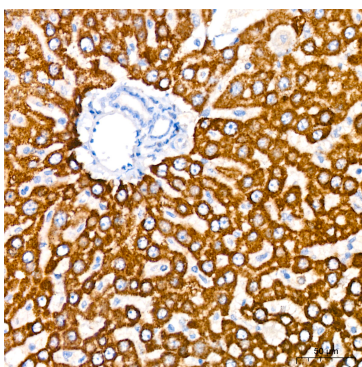
Immunohistochemistry analysis of paraffin-embedded Human kidney using Megalin/LRP2 Rabbit mAb (A24690) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



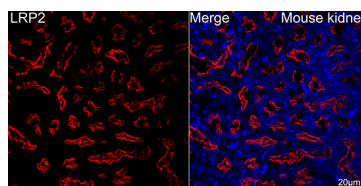
Immunohistochemistry analysis of paraffin-embedded Human liver using Megalin/LRP2 Rabbit mAb (A24690) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



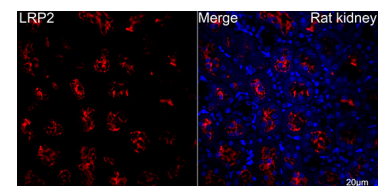
Immunohistochemistry analysis of paraffin-embedded Mouse kidney using Megalin/LRP2 Rabbit mAb (A24690) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat liver using Megalin/LRP2 Rabbit mAb (A24690) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

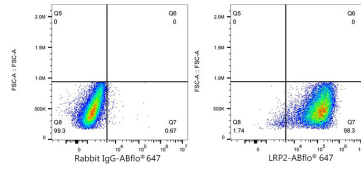
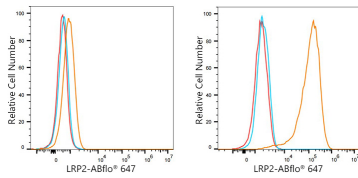


Confocal imaging of mouse kidney using Megalin/LRP2 Rabbit mAb (A24690, at dilution of 1:200) (Red). DAPI was used for nuclear staining (blue). Objective: 40x.



Confocal imaging of rat kidney using Megalin/LRP2 Rabbit mAb (A24690, at dilution of 1:200) (Red). DAPI was used for nuclear staining (blue). Objective: 40x.

Validation Data



Flow cytometry: 1×10^6 Reh cells (Low Expression, left) and Caco-2 (right) cells were intracellularly-stained with Megalin/LRP2 Rabbit mAb (A24690, 2 $\mu\text{g}/\text{mL}$, orange line) or ABflo® 647 Rabbit IgG isotype control (A22070, 5 $\mu\text{l}/\text{Test}$, blue line), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining. Non-fluorescently stained cells were used as blank control (red line).

Flow cytometry: 1×10^6 Caco-2 cells were intracellularly-stained with ABflo® 647 Rabbit IgG isotype control (A22070, 5 $\mu\text{l}/\text{Test}$, left) or Megalin/LRP2 Rabbit mAb (A24690, 2 $\mu\text{g}/\text{mL}$, right).