Recombinant LRPAP1 Monoclonal Antibody

catalog number: AN300503P

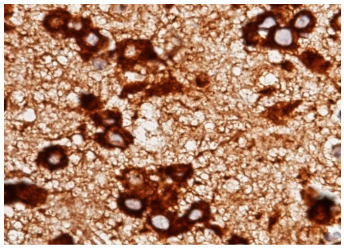
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

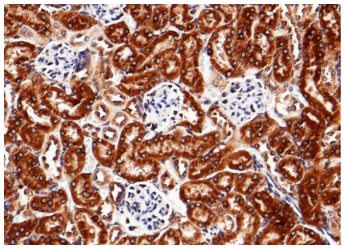
Reactivity	Mouse
Immunogen	Recombinant Mouse LRPAP1 protein
Host	Rabbit
Isotype	IgG
Clone	B433
Purification	Protein A
Buffer	0.2 μm filtered solution in PBS

Applications	Recommended Dilution
WB	1:500-1:1000
IHC-P	1:500-1:2000
ICC/IF	1:20-1:100
IP	0.2-1 μL/mg of lysate

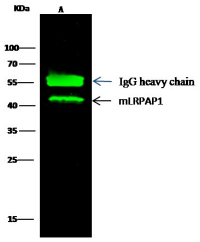
Data



Immunohistochemistry of paraffin-embedded mouse brain using LRPAP1 Monoclonal Antibody at dilution of 1:1000. The image showing staining of nerve cells.



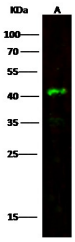
Immunohistochemistry of paraffin-embedded mouse brain using LRPAP1 Monoclonal Antibody at dilution of 1:1000. The image showing staining of nephric tubule.



Immunoprecipitation analysis using 0.5 μL anti-Mouse LRPAP1 Monoclonal Antibody and 15 μl of 50 % Protein G agarose. Western blot was performed from the immunoprecipitate using LRPAP1 Monoclonal Antibody at a dilution of 1:500. Lane A:0.5 mg A549 Whole Cell Lysate

Observed-MW:41 kDa

Calculated-MW:41 kDa

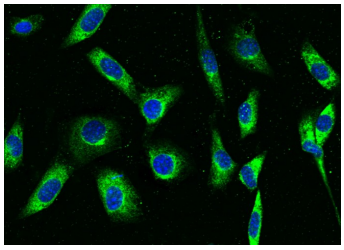


Western Blot with LRPAP1 Monoclonal Antibody at dilution of 1:500 dilution. Lane A: A549 Whole Cell Lysate, Lysates/proteins at 30 μg per lane.

Observed-MW:41 kDa

Calculated-MW:41 kDa

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Immunofluorescence analysis of Mouse LRPAP1 in NIH-3T3 cells. Cells were fixed with 4% PFA, permeabilzed with 0.1% Triton X-100 in PBS,blocked with 10% serum, and incubated with rabbit anti-mouse LRPAP1 monoclonal antibody (dilution ratio 1:60) at 4°C overnight. Then cells were stained with the Alexa Fluor®488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue).Positive staining was localized to Endoplasmic reticulum.

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

Receptor-associated protein (RAP) is a molecular chaperone for low-density lipoprotein receptor-related protein (LRP), which plays a key role in cholesterol metabolism. The lipoprotein receptor-related protein (LRP) is an endocytic receptor for several ligands, such as alpha2-macroglobulin (alpha2 M) and apolipoprotein E. LRP is involved in the clearance of lipids from the bloodstream and is expressed in the atherosclerotic plaque. The LRP-associated protein (LRPAP in humans, RAP in mice) acts as a chaperone protein, stabilizing the nascent LRP peptide in the endoplasmic reticulum and Golgi complex. Alpha-2-macroglobulin receptor-associated protein, also known as low-density lipoprotein receptor-related protein-associated protein 1, RAP, and LRPAP1, is a 39 kDa protein and a member of the alpha-2-MRAP family. It is a receptor antagonist that interacts with several members of the low-density lipoprotein (LDL) receptor gene family. Upon binding to these receptors, LRPAP1 inhibits all ligand interactions with the receptors. LRPAP1 is present on the cell surface forming a complex with the alpha-2-macroglobulin receptor heavy and light chains. It binds with LRP1B and the binding is followed by internalization and degradation. LRPAP1 interacts with LRP1/alpha-2-macroglobulin receptor and LRP2 (previously called glycoprotein 330) and may be involved in the pathogenesis of membrane glomerular nephritis. LRPAP1 together with LRP2 forms the Heymann nephritis antigenic complex. LRP2 is expressed in epithelial cells of the thyroid, where it can serve as a receptor for the protein thyroglobulin. Intron 5 insertion/deletion polymorphism of RAP gene (LRPAP1) has been implicated in other diseases sharing etiology with gallstone disease (GSD). The LRPAP1 insertion/deletion polymorphism influences cholesterol homeostasis and may confer risk for gallstone disease and gallbladder carcinoma (GBC) incidence usually parallels with the prevalence of cholelithiasis. The genetic variations at the LRPAP1 locus may modulate Alzheimer's disease (AD) phenotype beyond risk for disease. Also, the variation in the LRPAP1 gene could contribute to the risk of developing an early episode of myocardial infarction (MI).

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