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[KO]LRP1 Rabbit mAb

Catalog # AP74905

Product Information

Application	WB, IHC-P, IHC-F, FC, IP
Primary Accession	Q07954
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	504606

Additional Information

Gene ID	4035
Other Names	LRP1
Dilution	WB~~1:2000-1:10000 IHC-P~~N/A IHC-F~~N/A FC~~1:50-1:100 IP~~1:20-1:50
Format	1xPBS(pH 7.4), 150mM NaCl, 50% Glycerol, 0.02% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

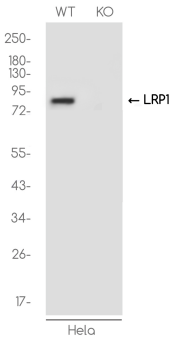
Name	LRP1 (HGNC:6692)
Synonyms	A2MR, APR
Function	Endocytic receptor involved in endocytosis and in phagocytosis of apoptotic cells (PubMed:11907044, PubMed:12713657). Required for early embryonic development (By similarity). Involved in cellular lipid homeostasis. Involved in the plasma clearance of chylomicron remnants and activated LRPAP1 (alpha 2-macroglobulin), as well as the local metabolism of complexes between plasminogen activators and their endogenous inhibitors. Acts as an LRPAP1 alpha-2- macroglobulin receptor (PubMed:1702392, PubMed:26142438). Acts as TAU/MAPT receptor and controls the endocytosis of TAU/MAPT as well as its subsequent spread (PubMed:32296178). May modulate cellular events, such as APP metabolism, kinase-dependent intracellular signaling, neuronal calcium signaling as well as neurotransmission (PubMed:12888553). Also acts as a receptor for IGFBP3 to mediate cell growth inhibition (PubMed:9252371).

Cellular Location	[Low-density lipoprotein receptor-related protein 1 85 kDa subunit]: Cell membrane; Single-pass type I membrane protein Membrane, coated pit [Low-density lipoprotein receptor-related protein 1 intracellular domain]: Cytoplasm Nucleus. Note=After cleavage, the intracellular domain (LRPICD) is detected both in the cytoplasm and in the nucleus.
Tissue Location	Most abundant in liver, brain and lung.

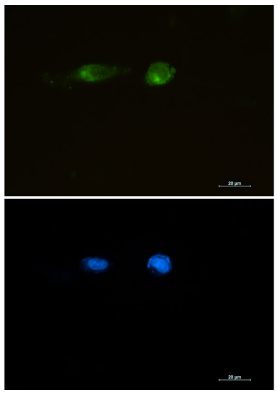
Background

This gene encodes a member of the low-density lipoprotein receptor family of proteins. The encoded preproprotein is proteolytically processed by furin to generate 515 kDa and 85 kDa subunits that form the mature receptor (PMID: 8546712). This receptor is involved in several cellular processes, including intracellular signaling, lipid homeostasis, and clearance of apoptotic cells. In addition, the encoded protein is necessary for the alpha 2-macroglobulin-mediated clearance of secreted amyloid precursor protein and beta-amyloid, the main component of amyloid plaques found in Alzheimer patients. Expression of this gene decreases with age and has been found to be lower than controls in brain tissue from Alzheimer's disease patients.

Images

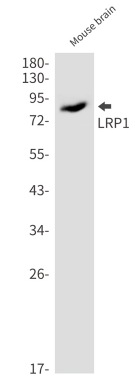


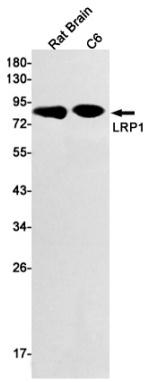
Western blot analysis of LRP1 in HeLa(WT) and LRP1-Knockout HeLa(KO) using LRP1 antibody.



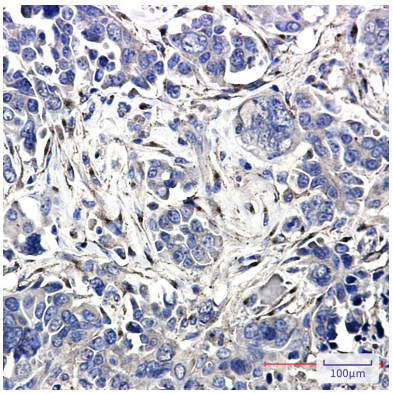
Immunocytochemistry analysis of LRP1 (green) in U87-MG using LRP1 antibody,and DAPI(blue).

Western blot analysis of LRP1 in mouse brain lysates using LRP1 antibody.





Western blot analysis of LRP1 in rat Brain, C6 lysates using LRP1 antibody



Immunohistochemistry analysis of paraffin-embedded Human Cholangiocarcinoma using LRP1 antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.

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