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LRP1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2134a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q07954
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1C8G6
Isotype	IgG1
Calculated MW	504606
Description	The protein encoded by this gene is an endocytic receptor involved in several cellular processes, including intracellular signaling, lipid homeostasis, and clearance of apoptotic cells. In addition, the encoded protein is necessary for the A2M-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 patients.
Immunogen	Purified recombinant fragment of human LRP1 (AA: 20-155) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	4035
Other Names	Prolow-density lipoprotein receptor-related protein 1, LRP-1, Alpha-2-macroglobulin receptor, A2MR, Apolipoprotein E receptor, APOER, CD91, Low-density lipoprotein receptor-related protein 1 85 kDa subunit, LRP-85, Low-density lipoprotein receptor-related protein 1 515 kDa subunit, LRP-515, Low-density lipoprotein receptor-related protein 1 intracellular domain, LRPICD, LRP1, A2MR, APR
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LRP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

References

1.Biomed Res Int. 2013;2013:152163.2.J Transl Med. 2012 Aug 8;10:160.

Images