

KD-Validated Anti-LDL receptor related protein 8 Rabbit Monoclonal Antibody Rabbit monoclonal antibody

Catalog # AGI1250

Specification

KD-Validated Anti-LDL receptor related protein 8 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB, FC, ICC <u>014114</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 106 kDa , observed, 106 kDa KDa
Gene Name Aliases	LRP8 LRP8; LDL Receptor Related Protein 8; APOER2; LRP-8; HSZ75190; MCI1; Low Density Lipoprotein Receptor-Related Protein 8, Apolipoprotein E Receptor; Low-Density Lipoprotein Receptor-Related Protein 8; Apolipoprotein E Receptor 2;
Immunogen	ApoE Receptor 2 A synthesized peptide derived from human ApoER2

KD-Validated Anti-LDL receptor related protein 8 Rabbit Monoclonal Antibody -Additional Information

Gene ID 7804 Other Names Low-density lipoprotein receptor-related protein 8, LRP-8, Apolipoprotein E receptor 2, LRP8, APOER2

KD-Validated Anti-LDL receptor related protein 8 Rabbit Monoclonal Antibody - Protein Information

Name LRP8

Synonyms APOER2

Function

Cell surface receptor for Reelin (RELN) and apolipoprotein E (apoE)-containing ligands (PubMed:12899622, PubMed:12950167, PubMed:20223215, PubMed:20223215, PubMed:30873003). LRP8 participates in transmitting the extracellular Reelin signal to intracellular signaling processes, by binding to DAB1 on its cytoplasmic tail (By similarity). Reelin acts via both the VLDL receptor



(VLDLR) and LRP8 to regulate DAB1 tyrosine phosphorylation and microtubule function in neurons (By similarity). LRP8 has higher affinity for Reelin than VLDLR (By similarity). LRP8 is thus a key component of the Reelin pathway which governs neuronal layering of the forebrain during embryonic brain development (By similarity). Binds the endoplasmic reticulum resident receptor-associated protein (RAP) (By similarity). Binds dimers of beta 2- glycoprotein I and may be involved in the suppression of platelet aggregation in the vasculature (PubMed:12807892). Highly expressed in the initial segment of the epididymis, where it affects the functional expression of clusterin and phospholipid hydroperoxide glutathione peroxidase (PHGPx), two proteins required for sperm maturation (By similarity). May also function as an endocytic receptor (By similarity). Not required for endocytic uptake of SEPP1 in the kidney which is mediated by LRP2 (By similarity). Together with its ligand, apolipoprotein E (apoE), may indirectly play a role in the suppression of the innate immune response by controlling the survival of myeloid- derived suppressor cells (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Secreted {ECO:0000250|UniProtKB:Q924X6}. Note=Isoforms that contain the exon coding for a furin-type cleavage site are proteolytically processed, leading to a secreted receptor fragment {ECO:0000250|UniProtKB:Q924X6}

Tissue Location

Expressed mainly in brain and placenta. Also expressed in platelets and megakaryocytic cells. Not expressed in the liver.

KD-Validated Anti-LDL receptor related protein 8 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KD-Validated Anti-LDL receptor related protein 8 Rabbit Monoclonal Antibody - Images

kDa	HI 100 HOR HOR HOR HOR CLEIN
250 —	E
150 —	LDL receptor related protein 8
100 —	LDL receptor related protein 8
75 —	opyright ©2024 Genuin Blot
	24 C
50 —	yright ©20
37 —	de la constante

Western blotting analysis using anti-LDL receptor related protein 8 antibody (Cat#AGI1250). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was



incubated with anti-LDL receptor related protein 8 antibody (Cat#AGI1250, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-LDL receptor related protein 8 antibody (Cat#AGI1250). LDL receptor related protein 8 expression in wild type (WT) and LDL receptor related protein 8 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-LDL receptor related protein 8 antibody (Cat#AGI1250, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of LDL receptor related protein 8 expression in HepG2 cells using LDL receptor related protein 8 antibody (Cat#AGI1250, 1:2,000). Green, isotype control; red, LDL receptor related protein 8.



Immunocytochemical staining of HepG2 cells with LDL receptor related protein 8 antibody (Cat#AGI1250, 1:1,000). Nuclei were stained blue with DAPI; LDL receptor related protein 8 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.