

# APOER2 (LRP8) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6159a

### Specification

# APOER2 (LRP8) Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	<u>Q14114</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	934-963

### APOER2 (LRP8) Antibody (C-term) - Additional Information

Gene ID 7804

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

#### Target/Specificity

This APOER2 (LRP8) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 934-963 amino acids from the C-terminal region of human APOER2 (LRP8).

**Dilution** WB~~1:1000 IHC-P~~1:50~100 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** APOER2 (LRP8) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### APOER2 (LRP8) Antibody (C-term) - Protein Information

Name LRP8



# Synonyms APOER2

Function Cell surface receptor for Reelin (RELN) and apolipoprotein E (apoE)-containing ligands (PubMed:<u>12899622</u>, PubMed:<u>12950167</u>, PubMed:<u>20223215</u>, PubMed:<u>30873003</u>). 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 receptorassociated 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:<u>12807892</u>). 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.

### APOER2 (LRP8) Antibody (C-term) - 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>

# APOER2 (LRP8) Antibody (C-term) - Images





The anti-LRP8 Pab (Cat. #AP6159a) is used in Western blot to detect LRP8 in placenta cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

### APOER2 (LRP8) Antibody (C-term) - Background

LPR8 is an apolipoprotein E receptor, a member of the low density lipoprotein receptor (LDLR) family. Apolipoprotein E is a small lipophilic plasma protein and a component of lipoproteins such as chylomicron remnants, very low density lipoprotein (VLDL), and high density lipoprotein (HDL). The apolipoprotein E receptor is involved in cellular recognition and internalization of these lipoproteins.

### APOER2 (LRP8) Antibody (C-term) - References

Li, X., et al., Biochemistry 42(35):10406-10417 (2003). Sun, X.M., et al., J. Biol. Chem. 278(22):19926-19932 (2003). Korschineck, I., et al., J. Biol. Chem. 276(16):13192-13197 (2001). Sun, X.M., et al., Eur. J. Biochem. 262(1):230-239 (1999). Trommsdorff, M., et al., Cell 97(6):689-701 (1999).