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ApoER2 (LRP8) Antibody (CT)

Rabbit Polyclonal Antibody

Catalog # ABV11271

Specification

ApoER2 (LRP8) Antibody (CT) - Product Information

Application	**WB, IHC**
Primary Accession	Q14114
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**105634**

ApoER2 (LRP8) Antibody (CT) - Additional Information

Gene ID 7804

Positive Control	**Western blot: Placenta lysate, IHC: human cancer tissue**
Application & Usage	**Western blot: ~1:1000, IHC: ~1:50-1:100.**

Other Names
LRP8; APOER2; Low-density lipoprotein receptor-related protein 8; Apolipoprotein E receptor 2

Target/Specificity
ApoER2

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µl of antibody in PBS with 0.09% (W/V) sodium azide

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
ApoER2 (LRP8) Antibody (CT) is for research use only and not for use in diagnostic or therapeutic procedures.

ApoER2 (LRP8) Antibody (CT) - Protein Information

Name LRP8

Synonyms APOER2

Function
Cell surface receptor for Reelin (RELN) and apolipoprotein E (apoE)-containing ligands (PubMed:20223215). LRP8 participates in transmitting the extracellular Reelin signal to intracellular signaling processes, by binding to DAB1 on its cytoplasmic tail. Reelin acts via both the VLDL receptor (VLDLR) and LRP8 to regulate DAB1 tyrosine phosphorylation and microtubule function in neurons. LRP8 has higher affinity for Reelin than VLDLR. LRP8 is thus a key component of the Reelin pathway which governs neuronal layering of the forebrain during embryonic brain development. Binds the endoplasmic reticulum resident receptor-associated protein (RAP). Binds dimers of beta 2-glycoprotein I and may be involved in the suppression of platelet aggregation in the vasculature. 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. May also function as an endocytic receptor. 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. Note=Isoforms that contain the exon coding for a furin- type cleavage site are proteolytically processed, leading to a secreted receptor fragment.

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

ApoER2 (LRP8) Antibody (CT) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ApoER2 (LRP8) Antibody (CT) - Images

ApoER2 (LRP8) Antibody (CT) - Background

ApoER2 (apolipoprotein E receptor 2), also designated LRP8, is a member of the LDL receptor gene family, which includes LDL receptor, LRP, megalin, VLDLR and ApoER2. The LDL receptor family is characterized by a cluster of cysteine-rich class A repeats, epidermal growth factor (EGF)-like repeats, YWTD repeats and an O-linked sugar domain. ApoER2 is expressed in brain and placenta and has several splice variants. ApoER2 is thought to mediate the interaction of extracellular Reelin and cytosolic mDab1 (mammalian disabled protein), which activates a tyrosine kinase. This pathway regulates the migration of neurons along the radial glial fiber network during brain

development.