

Product datasheet

Anti-ApoER2 antibody ab235909

2 Images

Overview

Product name	Anti-ApoER2 antibody
Description	Rabbit polyclonal to ApoER2
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment corresponding to Human ApoER2 aa 131-332. Database link: Q14114
Positive control	WB: SH-SY5Y, A549 and U-87 MG whole cell lysate. ICC/IF: HepG2 cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.03% Proclin Constituents: 50% Glycerol, PBS
Purity	Protein G purified
Purification notes	Purity >95%.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab235909** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

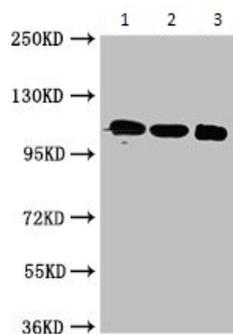
Application	Abreviews	Notes
WB		1/500 - 1/5000. Predicted molecular weight: 106 kDa.

Application	Abreviews	Notes
ICC/IF		1/50 - 1/200.

Target

Function	Cell surface receptor for Reelin (RELN) and apolipoprotein E (apoE)-containing ligands. 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.
Tissue specificity	Expressed mainly in brain and placenta. Also expressed in platelets and megakaryocytic cells. Not expressed in the liver.
Involvement in disease	Defects in LRP8 are a cause of myocardial infarction type 1 (MCI1) [MIM:608446]. A condition defined by the irreversible necrosis of heart muscle secondary to prolonged ischemia.
Sequence similarities	Belongs to the LDLR family. Contains 2 EGF-like domains. Contains 7 LDL-receptor class A domains. Contains 5 LDL-receptor class B repeats.
Domain	The cytoplasmic domain is involved in the binding of DAB1 and in the recruitment of JNK-interacting proteins. Isoforms, which lack part of the cytoplasmic domain, are unable to recruit members of the family of JNK interacting proteins (JIP) to the cytoplasmic tail.
Post-translational modifications	O-glycosylated. Some alternatively spliced isoforms lack the O-linked sugar domain. Undergoes sequential, furin and gamma-secretase dependent, proteolytic processing, resulting in the extracellular release of the entire ligand-binding domain as a soluble polypeptide and in the intracellular domain (ICD) release into the cytoplasm. The gamma-secretase-dependent proteolytical processing occurs after the bulk of the extracellular domain has been shed, in a furin-dependent manner, in alternatively spliced isoforms carrying the furin cleavage site. Hypoglycosylation (mainly hypo-O-glycosylation) leads to increased extracellular cleavage, which in turn results in accelerating release of the intracellular domain (ICD) by the gamma-secretase. The resulting receptor fragment is able to inhibit Reelin signaling and in particular the Reelin-induced DAB1 phosphorylation. Tyrosine phosphorylated upon apoE binding. Ubiquitinated by MYLIP leading to degradation.
Cellular localization	Cell membrane. Secreted. Isoforms that contain the exon coding for a furin-type cleavage site are proteolytically processed, leading to a secreted receptor fragment.

Images



Western blot - Anti-ApoER2 antibody (ab235909)

All lanes : Anti-ApoER2 antibody (ab235909) at 1/500 dilution

Lane 1 : SH-SY5Y (human neuroblastoma cell line from bone marrow) whole cell lysate

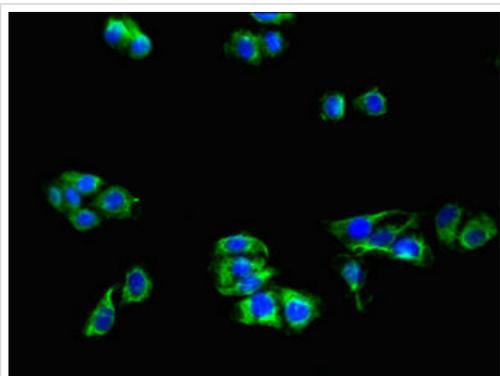
Lane 2 : A549 (human lung carcinoma cell line) whole cell lysate

Lane 3 : U-87 MG (human glioblastoma-astrocytoma epithelial cell line) whole cell lysate

Secondary

All lanes : Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 106 kDa



Immunocytochemistry/ Immunofluorescence - Anti-ApoER2 antibody (ab235909)

HepG2 (human liver hepatocellular carcinoma cell line) cells labeling ApoER2 using ab235909 at 1/100 dilution in ICC/IF. Secondary antibody was Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (H+L).

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