abcam

Product datasheet

Anti-ApoER2 antibody [EPR3326] ab108208



ייבעדיו RabMAb

★★★★★ 1 Abreviews 21 References 画像数 5

製品の概要

製品名 Anti-ApoER2 antibody [EPR3326]

製品の詳細 Rabbit monoclonal [EPR3326] to ApoER2

由来種 Rabbit

アプリケーション **適用あり:** WB, IP

適用なし: ICC/IF or IHC-P

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール SH-SY5Y, C6, Neuro-2a, Human fetal brain, Mouse brain, and Rat brain lysates,

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EPR3326

ΙgG アイソタイプ

Abpromise保証は、次のテスト済みアプリケーションにおけるab108208の使用に適用されます The Abpromise guarantee アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	**** <u>(1)</u>	1/1000 - 1/10000. Predicted molecular weight: 106 kDa.
IP		1/10 - 1/100.

追加情報

Is unsuitable for ICC/IF or IHC-P.

ターゲット情報

機能

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 2glycoprotein 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.

組織特異性

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

関連疾患

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.

配列類似性

Belongs to the LDLR family.

Contains 2 EGF-like domains.

Contains 7 LDL-receptor class A domains. Contains 5 LDL-receptor class B repeats.

ドメイン

The cytoplasmic domain is involved in the binding of DAB1 and in the recruitment of JNKinteracting 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.

翻訳後修飾

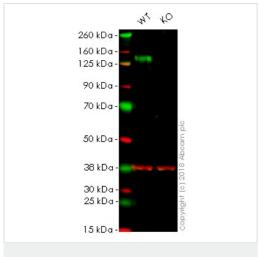
O-glycosylated. Some alternatively spliced isoforms lack the O-linked sugar domain. Undergoes sequential, furin and gamma-secretase dependent, proteolytic processing, resulting in the extracellular release of the entire ligand-binding domain as a soluble polypeptide and in the intracellular domain (ICD) release into the cytoplasm. The gamma-secretase-dependent proteolytical processing occurs after the bulk of the extracellular domain has been shed, in a furindependent 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 Reelininduced DAB1 phosphorylation.

Tyrosine phosphorylated upon apoE binding.

Cell membrane. Secreted. Isoforms that contain the exon coding for a furin-type cleavage site are proteolytically processed, leading to a secreted receptor fragment.

画像



Western blot - Anti-ApoER2 antibody [EPR3326] (ab108208)

All lanes : Anti-ApoER2 antibody [EPR3326] (ab108208) at 1/1000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

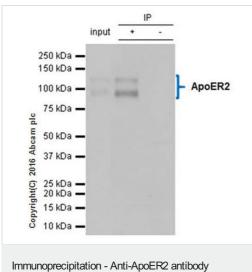
Lane 2: ApoER2 knockout HAP1 whole cell lysate

Lysates/proteins at 40 µg per lane.

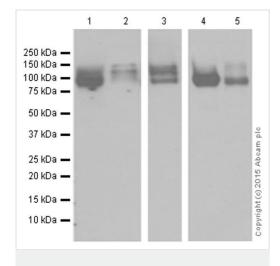
Predicted band size: 106 kDa

Lanes 1 - 2: Merged signal (red and green). Green - ab108208 observed at 106 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab108208 was shown to specifically react with ApoER2 in wild-type HAP1 cells as signal was lost in LRP8 knockout cells. Wild-type and ApoER2 knockout samples were subjected to SDS-PAGE. Ab108208 and ab9484 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-ApoER2 antibody [EPR3326] (ab108208)



Western blot - Anti-ApoER2 antibody [EPR3326] (ab108208)

ab108208 (purified) at 1/40 immunoprecipitating ApoER2 in SH-SY5Y (human neuroblastoma) whole cell lysate.

Lane 1 (input): SH-SY5Y whole cell lysate 10ug

Lane 2 (+): ab108208 + SH-SY5Y whole cell lysate

Lane 3 (-): Rabbit monoclonal lgG (ab172730) instead of ab108208 in SH-SY5Y whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

All lanes : Anti-ApoER2 antibody [EPR3326] (ab108208) at 1/10000 dilution (purified)

Lane 1: SH-SY5Y (human neuroblastoma) whole cell lysate

Lane 2: Human fetal brain tissue lysate

Lane 3: Mouse brain tissue lysate

Lane 4: C6 (rat glioma) whole cell lysate

Lane 5: Neuro-2a (mouse neuroblastoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/2000 dilution

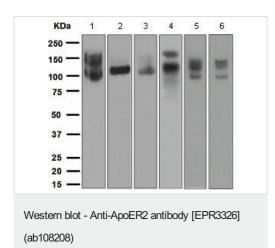
Predicted band size: 106 kDa

Observed band size: 130-170 kDa

Blocking and diluting buffer 5% NFDM/TBST.

130kDa: Immature form;

170kDa: Glycosylated mature form. (PMID:24344333, 24532792, 24705369 and 25233900)



All lanes : Anti-ApoER2 antibody [EPR3326] (ab108208) at 1/1000 dilution (unpurified)

Lane 1: SH-SY5Y cell lysate

Lane 2: C6 cell lysate

Lane 3: Neuro-2a cell lysate

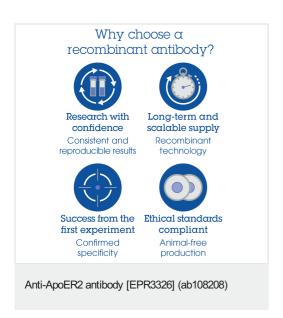
Lane 4 : Human Fetal Brain cell lysate

Lane 5 : Mouse Fetal Brain cell lysate

Lysates/proteins at 10 µg per lane.

Lane 6: Rat Fetal Brain cell lysate

Predicted band size: 106 kDa



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