abcam

Product datasheet

Anti-Presenilin 2/AD5 antibody [EP1515Y] ab51249



重组 RabMAb

★★★★★ 7 Abreviews 15 References 7 图像

概述

产品名称 Anti-Presenilin 2/AD5抗体[EP1515Y]

描述 兔单克隆抗体[EP1515Y] to Presenilin 2/AD5

宿主 Rabbit

特异性 The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for

mouse and rat.

经测试应用 适用于: Flow Cyt (Intra), WB, IHC-P, IP, ICC/IF

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide within Human Presenilin 2/AD5 aa 300-400 (C terminal). The exact sequence is

proprietary.

阳性对照 WB: HeLa, HepG2, C2C12, C6, and Neuro-2a lysates; IHC-P: Human cerebrum tissue; ICC/IF:

PC-12 cells; Flow Cyt (intra): HeLa cells; IP: HeLa and PC-12 cell lysates.

常规说明 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**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

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

纯度 Protein A purified

克隆 单克隆

克隆编号 EP1515Y

同种型 IgG

应用

The Abpromise quarantee Abpromise™承诺保证使用ab51249于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/50.
WB	**** <u>(4)</u>	1/20000. Detects a band of approximately 23 kDa (predicted molecular weight: 50 kDa).
IHC-P	**** (1)	1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See IHC antigen retrieval protocols. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
IP	*** <u>*</u>	1/20.
ICC/IF		1/50 - 1/250.

靶标

功能

Probable catalytic subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (beta-amyloid precursor protein). Requires the other members of the gamma-secretase complex to have a protease activity. May play a role in intracellular signaling and gene expression or in linking chromatin to the nuclear membrane. May function in the cytoplasmic partitioning of proteins.

组织特异性

lsoform 1 is seen in the placenta, skeletal muscle and heart while isoform 2 is seen in the heart, brain, placenta, liver, skeletal muscle and kidney.

疾病相关

Defects in PSEN2 are the cause of Alzheimer disease type 4 (AD4) [MIM:606889]. AD is an autosomal dominant Alzheimer disease. Alzheimer disease is a neurodegenerative disorder characterized by progressive dementia, loss of cognitive abilities, and deposition of fibrillar amyloid proteins as intraneuronal neurofibrillary tangles, extracellular amyloid plaques and vascular amyloid deposits. The major constituent of these plaques is the neurotoxic amyloid-beta-APP 40-42 peptide (s), derived proteolytically from the transmembrane precursor protein APP by sequential secretase processing. The cytotoxic C-terminal fragments (CTFs) and the caspase-cleaved products such as C31 derived from APP, are also implicated in neuronal death. Defects in PSEN2 are the cause of cardiomyopathy dilated type 1V (CMD1V) [MIM:613697]. It is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

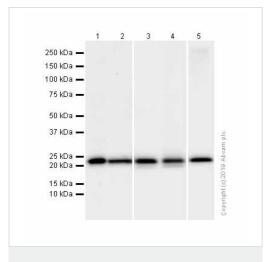
序列相似性

Belongs to the peptidase A22A family.

结**构域**

The PAL motif is required for normal active site conformation.

图片



Western blot - Anti-Presenilin 2/AD5 antibody [EP1515Y] (ab51249)

All lanes : Anti-Presenilin 2/AD5 antibody [EP1515Y] (ab51249) at 1/20000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates

Lane 3: C2C12 (Mouse myoblasts myoblast) whole cell lysates

Lane 4: C6 (Rat glial tumor glial cell) whole cell lysates

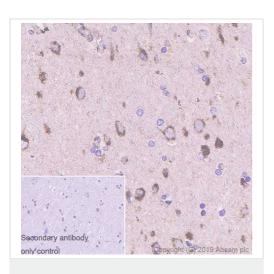
Lane 5 : Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary

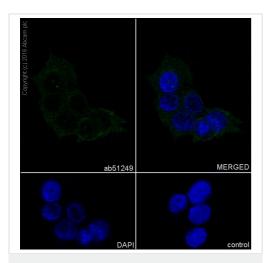
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 50 kDa **Observed band size:** 23 kDa



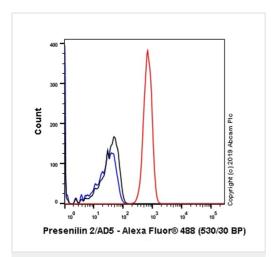
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Presenilin 2/AD5 antibody [EP1515Y] (ab51249)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebrum tissue sections labeling Presenilin 2/AD5 with purified ab51249 at 1/500 dilution (0.51 µg/ml). Heat mediated antigen retrieval using BondTM Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



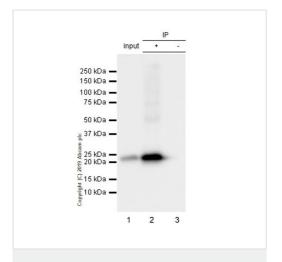
Immunocytochemistry/ Immunofluorescence - Anti-Presenilin 2/AD5 antibody [EP1515Y] (ab51249)

Immunocytochemistry/ Immunofluorescence analysis of PC-12 (Rat adrenal gland pheochromocytoma) cells labeling Presenilin 2/AD5 with purified ab51249 at 1/50 dilution (5 μ g/ml). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 μ g/ml). Goat anti rabbit lgG (Alexa Fluor® 488, <u>ab150077</u>) was used as the secondary antibody at 1/1000 (2 μ g/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-Presenilin 2/AD5 antibody [EP1515Y] (ab51249)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Presenilin 2/AD5 with purified ab51249 at 1/50 dilution (5 μ g/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunoprecipitation - Anti-Presenilin 2/AD5 antibody [EP1515Y] (ab51249)

ab51249 (purified) at 1/20 dilution (1ug) immunoprecipitating Presenilin 2/AD5 in HeLa whole cell lysate.

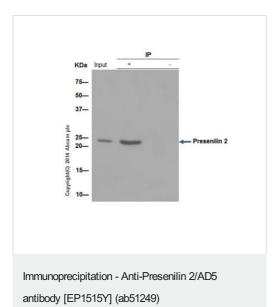
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10ug

Lane 2 (+): ab51249 & HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab51249 in HeLa whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



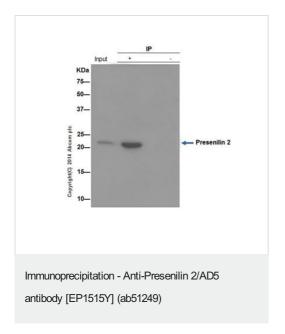
Presenilin was immunoprecipitated from 1 mg of HeLa whole cell extract with unpurified ab51249 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab51249 at 1/5000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

Input: HeLa whole cell extract 10 µg.

IP (+): ab51249 IP in HeLa whole cell extract.

IP (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab51249 in HeLa whole cell extract.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.



Presenilin was immunoprecipitated from 1 mg of PC-12 (rat adrenal gland pheochromocytoma) whole cell extract with unpurified ab51249 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab51249 at 1/5000 dilution. Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG, was used as secondary antibody at 1/1500 dilution.

Input: PC-12 whole cell extract 10 µg.

IP (+): ab51249 IP in PC-12 whole cell extract.

IP (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab51249 in PC-12 whole cell extract.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

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