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Product datasheet

Anti-Presenilin 1/PS-1 antibody [APS 18] ab15458

3 References 画像数 7

製品の概要

製品名	Anti-Presenilin 1/PS-1 antibody [APS 18]
製品の詳細	Mouse monoclonal [APS 18] to Presenilin 1/PS-1
由来種	Mouse
アプリケーション	**適用あり:** WB, IHC-P, ICC/IF
種交差性	**交差種:** Mouse, Human **交差が予測される動物種:** Cynomolgus monkey
免疫原	Synthetic peptide corresponding to Human Presenilin 1/PS-1 aa 300-400. Database link: **P49768** Run BLAST with Run BLAST with
ポジティブ・コントロール	WB: T-47D, MCF7, Daudi, SH-SY5Y, Caco-2 cell lysate. IHC-P: Human liver and tonsil tissue. ICC: MCF-7 cells, A2058 melanoma cells, mouse fibroblasts and HeLa cells.
特記事項	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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	Preservative: 0.05% Sodium azide Constituents: 99% PBS, 0.1% BSA
精製度	Protein G purified
ポリ/モノ	モノクローナル
クローン名	APS 18
アイソタイプ	IgG1

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab15458の使用に適用されます

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		1/500. Predicted molecular weight: 53 kDa.
IHC-P		1/20 - 1/200.
ICC/IF		1/50 - 1/200.

ターゲット情報

機能

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. Stimulates cell-cell adhesion though its association with the E-cadherin/catenin complex. Under conditions of apoptosis or calcium influx, cleaves E-cadherin promoting the disassembly of the E-cadherin/catenin complex and increasing the pool of cytoplasmic beta-catenin, thus negatively regulating Wnt signaling. May also play a role in hematopoiesis.

組織特異性

Expressed in a wide range of tissues including various regions of the brain, liver, spleen and lymph nodes.

関連疾患

Defects in PSEN1 are a cause of Alzheimer disease type 3 (AD3) [MIM:607822]. AD3 is a familial early-onset form of 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 PSEN1 are a cause of frontotemporal dementia [MIM:600274].
Defects in PSEN1 are the cause of cardiomyopathy dilated type 1U (CMD1U) [MIM:613694]. 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.
Defects in PSEN1 are the cause of acne inversa familial type 3 (ACNIF3) [MIM:613737]. A chronic relapsing inflammatory disease of the hair follicles characterized by recurrent draining sinuses, painful skin abscesses, and disfiguring scars. Manifestations typically appear after puberty.

配列類似性

Belongs to the peptidase A22A family.

ドメイン

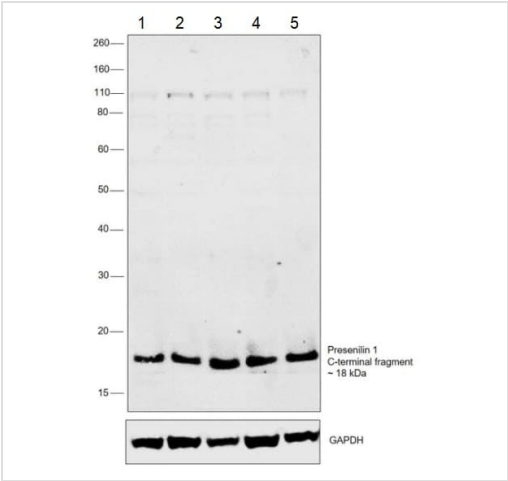
The PAL motif is required for normal active site conformation.

翻訳後修飾

Heterogeneous proteolytic processing generates N-terminal (NTF) and C-terminal (CTF) fragments of approximately 35 and 20 kDa, respectively. During apoptosis, the C-terminal fragment (CTF) is further cleaved by caspase-3 to produce the fragment, PS1-CTF12.
After endoproteolysis, the C-terminal fragment (CTF) is phosphorylated on serine residues by PKA and/or PKC. Phosphorylation on Ser-346 inhibits endoproteolysis.

細胞内局在	Endoplasmic reticulum membrane. Golgi apparatus membrane. Cell surface. Bound to NOTCH1 also at the cell surface. Colocalizes with CDH1/2 at sites of cell-cell contact. Colocalizes with CTNNB1 in the endoplasmic reticulum and the proximity of the plasma membrane. Also present in azurophil granules of neutrophils.

画像



Western blot - Anti-Presenilin 1/PS-1 antibody [APS 18] (ab15458)

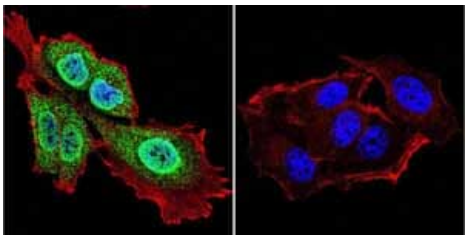
All lanes : Anti-Presenilin 1/PS-1 antibody [APS 18] (ab15458) at 1/500 dilution

Lane 1 : T-47D (human ductal breast epithelial tumor cell line) whole cell lysate
Lane 2 : MCF7 (human breast adenocarcinoma cell line) whole cell lysate
Lane 3 : Daudi (human Burkitt's lymphoma cell line) whole cell lysate
Lane 4 : SH-SY5Y (human neuroblastoma cell line from bone marrow) whole cell lysate
Lane 5 : Caco-2 (human colorectal adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

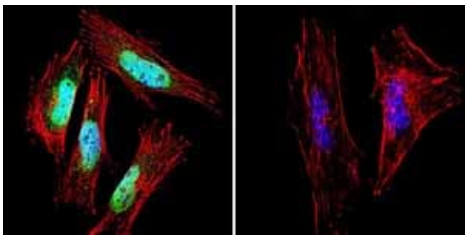
Secondary
All lanes : Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP at 1/4000 dilution

Predicted band size: 53 kDa



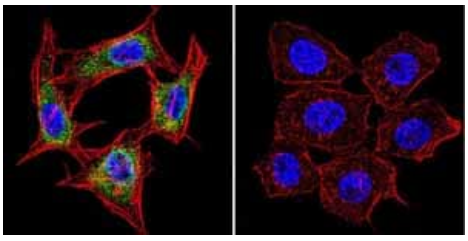
Immunocytochemistry/ Immunofluorescence - Anti-Presenilin 1/PS-1 antibody [APS 18] (ab15458)

Immunofluorescent analysis of Presenilin 1 / PS-1 using Presenilin 1 / PS-1 Monoclonal antibody (APS 18) **ab115458** shows staining in MCF-7 cells. Presenilin 1 / PS-1 staining (green) F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Presenilin 1 / PS-1 **ab115458** at a dilution of 1:20-1:100 over night at 4 ?C washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



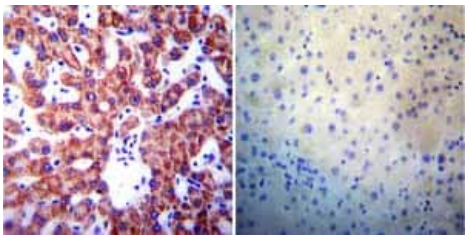
Immunocytochemistry/ Immunofluorescence - Anti-Presenilin 1/PS-1 antibody [APS 18] (ab15458)

Immunofluorescent analysis of Presenilin 1 / PS-1 using Presenilin 1 / PS-1 Monoclonal antibody (APS 18) **ab115458** shows staining in A2058 melanoma cells. Presenilin 1 / PS-1 staining (green) F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Presenilin 1 / PS-1 **ab115458** at a dilution of 1:20-1:100 over night at 4 ?C washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



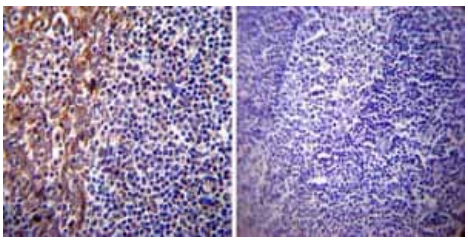
Immunocytochemistry/ Immunofluorescence - Anti-Presenilin 1/PS-1 antibody [APS 18] (ab15458)

Immunofluorescent analysis of Presenilin 1 / PS-1 using Presenilin 1 / PS-1 Monoclonal antibody (APS 18) **ab115458** shows staining in HeLa cells. Presenilin 1 / PS-1 staining (green) F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Presenilin 1 / PS-1 **ab115458** at a dilution of 1:20-1:100 over night at 4 ?C washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



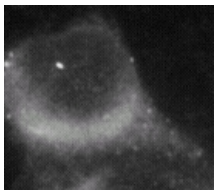
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Presenilin 1/PS-1 antibody [APS 18] (ab15458)

Immunohistochemistry was performed on normal biopsies of deparaffinized Human liver tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:200 with a mouse monoclonal antibody recognizing Presenilin 1 / PS-1 ab15458 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Presenilin 1/PS-1 antibody [APS 18] (ab15458)

Immunohistochemistry was performed on normal biopsies of deparaffinized Human tonsil tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:20 with a mouse monoclonal antibody recognizing Presenilin 1 / PS-1 ab15458 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunocytochemistry/ Immunofluorescence - Anti-Presenilin 1/PS-1 antibody [APS 18] (ab15458)

IF showing PS1 in mouse fibroblasts using ab15458.

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