

Anti-BACE1 antibody [EPR3956] ab108394

敲除验证
重组
RabMAb

★★★★★
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概述

产品名称	Anti-BACE1抗体[EPR3956]
描述	兔单克隆抗体[EPR3956] to BACE1
宿主	Rabbit
经测试应用	适用于: WB, IP 不适用于: Flow Cyt, ICC/IF or IHC-P
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: SH-SY5Y cell lysate and human fetal, mouse and rat brain tissue lysates. IP: Human fetal brain tissue lysate.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, PBS, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR3956

同种型

IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab108394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
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 56 kDa.
IP		1/10 - 1/100.

应用说明

Is unsuitable for Flow Cyt, ICC/IF or IHC-P.

靶标

功能

Responsible for the proteolytic processing of the amyloid precursor protein (APP). Cleaves at the N-terminus of the A-beta peptide sequence, between residues 671 and 672 of APP, leads to the generation and extracellular release of beta-cleaved soluble APP, and a corresponding cell-associated C-terminal fragment which is later released by gamma-secretase.

组织特异性

Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coruleus and medulla oblongata.

序列相似性

Belongs to the peptidase A1 family.

结构域

The transmembrane domain is necessary for its activity. It determines its late Golgi localization and access to its substrate, APP.

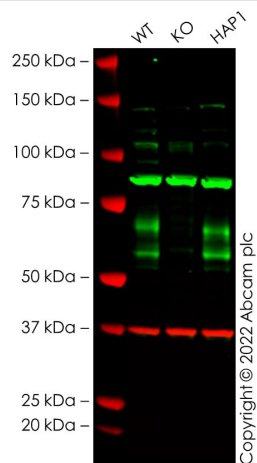
翻译后修饰

Glycosylated.

细胞定位

Membrane. Golgi apparatus > trans-Golgi network. Endoplasmic reticulum. Endosome. Cell surface. Predominantly localized to the later Golgi/trans-Golgi network (TGN) and minimally detectable in the early Golgi compartments. A small portion is also found in the endoplasmic reticulum, endosomes and on the cell surface.





Western blot - Anti-BACE1 antibody [EPR3956]
(ab108394)

All lanes : Anti-BACE1 antibody [EPR3956] (ab108394) at 1/1000 dilution

Lane 1 : Wild-type SH-SY5Y cell lysate

Lane 2 : Bace1 knockout SH-SY5Y cell lysate

Lane 3 : HAP1 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

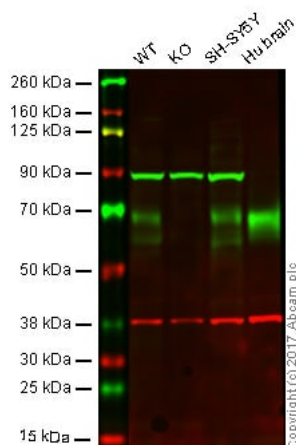
Performed under reducing conditions.

Predicted band size: 56 kDa

Observed band size: 60,70 kDa

False colour image of Western blot: Anti-BACE1 antibody [EPR3956] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab108394 was shown to bind specifically to BACE1. A band was observed at 60/70 kDa in wild-type SH-SY5Y cell lysates with no signal observed at this size in Bace1 knockout cell line [ab280078](#) (knockout cell lysate [ab280137](#)).

To generate this image, wild-type and Bace1 knockout SH-SY5Y cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-BACE1 antibody [EPR3956]
(ab108394)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

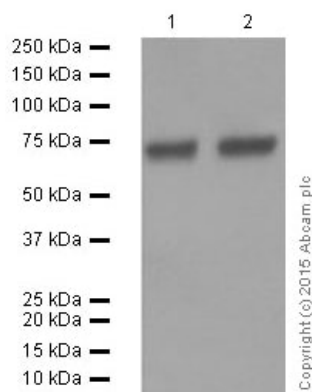
Lane 2: BACE1 knockout HAP1 whole cell lysate (20 µg)

Lane 3: SHSY5Y whole cell lysate (20 µg)

Lane 4: Human brain whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab108394 observed at 70 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab108394 was shown to recognize BACE1 in wild type cells as signal was lost at the expected MW in BACE1 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and BACE1 knockout samples were subjected to SDS-PAGE. Ab108394 and **ab9484** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 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.



Western blot - Anti-BACE1 antibody [EPR3956]
(ab108394)

All lanes : Anti-BACE1 antibody [EPR3956] (ab108394) at 1/10000 dilution (purified)

Lane 1 : Mouse brain tissue lysate

Lane 2 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

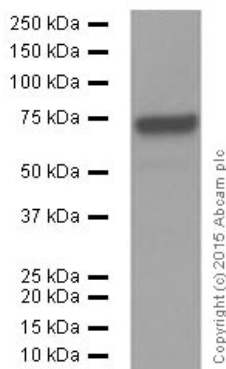
Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 70 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-BACE1 antibody [EPR3956]
(ab108394)

Anti-BACE1 antibody [EPR3956] (ab108394) at 1/10000 dilution
(purified) + Human fetal brain tissue lysate at 20 µg

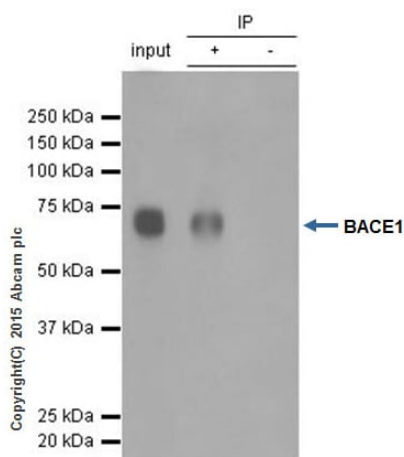
Secondary

Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 70 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Immunoprecipitation - Anti-BACE1 antibody
[EPR3956] (ab108394)

ab108394 (purified) at 1/40 immunoprecipitating BACE1 in human fetal brain whole tissue lysate.

Lane 1 (input): human fetal brain whole tissue lysate (10µg)

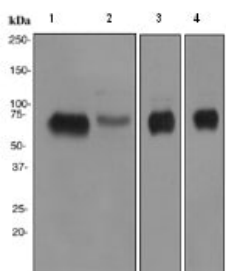
Lane 2 (+): ab108394 + human fetal brain whole tissue lysate (10µg).

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab108394 in human fetal brain whole tissue lysate.

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1500 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-BACE1 antibody [EPR3956]
(ab108394)

All lanes : Anti-BACE1 antibody [EPR3956] (ab108394) at 1/1000 dilution (unpurified)

Lane 1 : Fetal brain lysate

Lane 2 : SH-SY5Y lysate





Lane 3 : Mouse brain lysate

Lane 4 : Rat brain lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 56 kDa

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-BACE1 antibody [EPR3956] (ab108394)

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