# abcam

# Product datasheet

# Anti-BACE2 antibody [EPR23339-221] ab270458



重组 RabMAb

★★★★★ 2 Abreviews 2 References 9图像

概述

产品名称 Anti-BACE2抗体[EPR23339-221]

描述 兔单克隆抗体[EPR23339-221] to BACE2

宿主 Rabbit

经测试应用 适用于: IHC-Fr, WB, ICC/IF, IP, IHC-P

种属反应性 与反应: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HeLa, A549, C6, Beta-TC-6 and Neuro 2a cell lysate. IHC-P: Mouse and rat pancreas

tissue. IHC-fr: Mouse pancreas. ICC/IF: Beta-TC-6 cells. IP: Neuro-2a whole cell lysate.

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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

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 EPR23339-221

同种型 ΙgG

### The Abpromise guarantee Abpromise™承诺保证使用ab270458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
IHC-Fr		1/100.
WB	<b>★</b> ☆ ☆ ☆ ☆ (1)	1/1000. Predicted molecular weight: 56 kDa.
ICC/IF		1/50. 100% methanol fixation is recommended.
IP		1/30.
IHC-P	****(1)	1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

#### 靶标

功能 Responsible for the proteolytic processing of the amyloid precursor protein (APP). Cleaves APP,

between residues 690 and 691, leading to the generation and extracellular release of betacleaved soluble APP, and a corresponding cell-associated C-terminal fragment which is later released by gamma-secretase. It has also been shown that it can cleave APP between residues

671 and 672.

组织特异性 Brain. Present in neurons within the hippocampus, frontal cortex and temporal cortex (at protein

level). Expressed at low levels in most peripheral tissues and at higher levels in colon, kidney, pancreas, placenta, prostate, stomach and trachea. Expressed at low levels in the brain. Found in spinal cord, medulla oblongata, substantia nigra and locus coruleus. Expressed in the ductal

epithelium of both normal and malignant prostate.

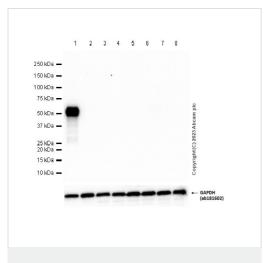
序列相似性 Belongs to the peptidase A1 family.

翻译后修饰 Undergoes autoproteolytic cleavage.

Glycosylated.

细胞定位 Membrane. Golgi apparatus. Endoplasmic reticulum. Endosome. Cell surface.

#### 图片



Western blot - Anti-BACE2 antibody [EPR23339-221] (ab270458)

**All lanes :** Anti-BACE2 antibody [EPR23339-221] (ab270458) at 1/1000 dilution

Lane 1 : Beta-TC-6 (Mouse pancreas insulinoma beta cell) whole cell lysate

Lane 2: Mouse brain tissue lysate

Lane 3: Mouse hippocampus tissue

Lane 4: Mouse cerebellum tissue

Lane 5: Mouse cerebral cortex tissue

Lane 6: Mouse spinal cord tissue

Lane 7: Mouse midbrain tissue lysate

Lane 8: Mouse forebrain tissue lysate

Lysates/proteins at 20 µg per lane.

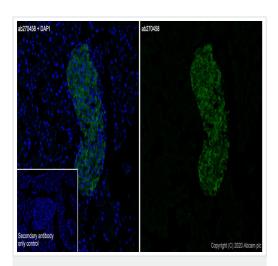
### Secondary

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

**Predicted band size:** 56 kDa **Observed band size:** 56 kDa

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

Brain has very low level of BACE2 [PMID: 10749877, PMID: 30626751].

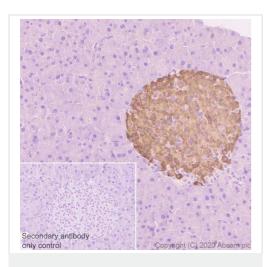


Immunohistochemistry (Frozen sections) - Anti-BACE2 antibody [EPR23339-221] (ab270458)

Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen mouse pancreas tissue labeling BACE2 with ab270458 at 1/100 dilution followed by <u>ab150077</u> AlexaFluor<sup>®</sup>488 Goat anti-Rabbit secondary at 1/1000 (2  $\mu$ g/ml) dilution. The nuclear counterstain was DAPI (Blue).

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was <a href="mailto:ab150077"><u>ab150077</u></a> AlexaFluor<sup>®</sup>488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.

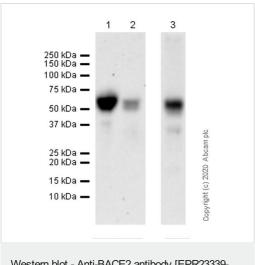


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-BACE2 antibody
[EPR23339-221] (ab270458)

Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue labeling BACE2 with ab270458 at 1/100 followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on mouse pancreatic islet (PMID: 21907142). The section was incubated with ab270458 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Western blot - Anti-BACE2 antibody [EPR23339-221] (ab270458)

**All lanes :** Anti-BACE2 antibody [EPR23339-221] (ab270458) at 1/1000 dilution

**Lane 1 :** HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate

**Lane 2**: A549 (human lung carcinoma epithelial cell), whole cell lysate

Lane 3: C6 (rat glial tumor glial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

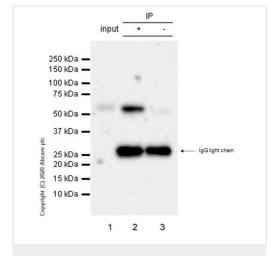
#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 56 kDa

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

Exposure time: 136 secs.



Immunoprecipitation - Anti-BACE2 antibody [EPR23339-221] (ab270458)

BACE2 was immunoprecipitated from 0.35 mg Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate with ab270458 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab270458 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

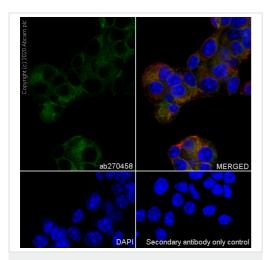
Lane 1: Neuro-2a whole cell lysate.

Lane 2: ab270458 IP in Neuro-2a whole cell lysate.

**Lane 3:** Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab270458 in Neuro-2a whole cell lysate.

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

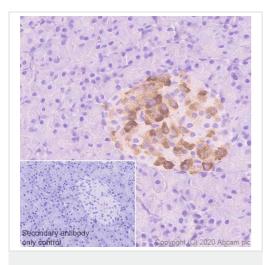
Exposure time: 3 mins.



Immunocytochemistry/ Immunofluorescence - Anti-BACE2 antibody [EPR23339-221] (ab270458)

Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized Beta-TC-6 cells labeling BACE2 with ab270458 at 1/50 dilution, followed by <a href="mailto:ab150077">ab150077</a> Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplamic and membranous staining in Beta-TC-6 cell line. 100% methanol fixation is recommended. <a href="mailto:ab195889">ab195889</a> Antialpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) at 1/1000 dilution.

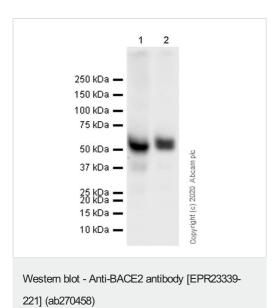


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-BACE2 antibody
[EPR23339-221] (ab270458)

Immunohistochemical analysis of paraffin-embedded rat pancreas tissue labeling BACE2 with ab270458 at 1/100 followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on rat pancreatic islet (PMID: 21907142). The section was incubated with ab270458 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



**All lanes :** Anti-BACE2 antibody [EPR23339-221] (ab270458) at 1/1000 dilution

Lane 1 : Beta-TC-6 (mouse pancreas insulinoma beta cell), whole cell lysate

**Lane 2**: Neuro-2a (mouse neuroblastoma neuroblast), whole cell lysate

Lysates/proteins at 40 µg per lane.

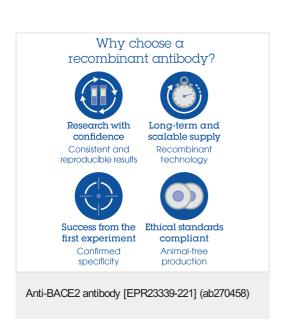
## **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 56 kDa

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

Exposure time: 10 secs.



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