abcam

Product datasheet

Anti-Neurogranin antibody [EPR21152] ab217672

יעלאעבע RabMAb

★★★★★ 3 Abreviews 3 References 画像数9

製品の概要

ポジティブ・コントロール

製品名 Anti-Neurogranin antibody [EPR21152]

製品の詳細 Rabbit monoclonal [EPR21152] to Neurogranin

由来種 Rabbit

アプリケーション 適用あり: IHC-Fr, WB, IHC-P, IP, ICC/IF

種交差性 交差種: Mouse, Rat, Human

交差が予測される動物種: Common marmoset 4

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

WB: Human fetal brain lysate and brain cortex lysate; mouse cerebral cortex lysate. Rat brain lysate. IHC-P: Human cerebellum tissue; mouse and rat cerebrum tissue. IHC-Fr: Mouse and rat

hippocampus CA1 tissue. IP: Mouse cerebral cortex lysate. ICC/IF: Primary rat cortical neurons

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

保存方法 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.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

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

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EPR21152

ΙgG

アプリケーション

アイソタイプ

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab217672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
IHC-Fr		1/3000. Perform heat-mediated antigen retrieval by using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
WB		1/1000. Detects a band of approximately 15 kDa (predicted molecular weight: 8 kDa).
IHC-P	****(3)	1/5000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.
ICC/IF		1/1500.

ターゲット情報

機能 Acts as a "third messenger" substrate of protein kinase C-mediated molecular cascades during

synaptic development and remodeling. Binds to calmodulin in the absence of calcium.

組織特異性 In the cerebral cortex, found in the cell bodies of neurons in layers II-VI, and in apical and basal

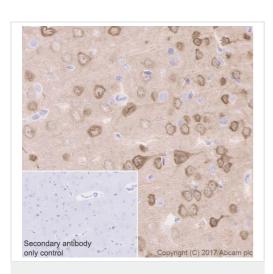
dendrites of pyramidal neurons. Is not found in the dendrites in patients with Alzheimer disease.

配列類似性 Belongs to the neurogranin family.

Contains 1 collagen-like domain.

Contains 1 IQ domain.

画像

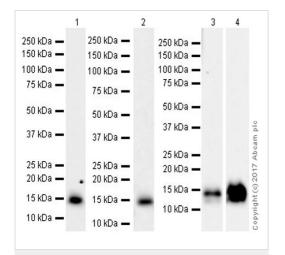


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Neurogranin antibody
[EPR21152] (ab217672)

Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling Neurogranin with ab217672 at 1/5000 dilution, followed by a ready to use Goat Anti-Rabbit lgG H&L (HRP). Mainly cytoplasmic staining on rat cerebrum (PMID: 26076492) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).



Western blot - Anti-Neurogranin antibody [EPR21152] (ab217672)

All lanes : Anti-Neurogranin antibody [EPR21152] (ab217672) at 1/1000 dilution

Lane 1: Human fetal brain lysate at 10 µg

Lane 2: Human brain cortex lysate at 10 µg

Lane 3: Mouse cerebral cortex lysate at 20 µg

Lane 4: Rat brain lysate at 20 µg

Secondary

 $\textbf{Lanes 1-2}: \ \mathsf{Goat} \ \mathsf{Anti-Rabbit} \ \mathsf{lgG} \ \mathsf{H\&L} \ (\mathsf{HRP}) \ (\underline{ab97051}) \ \mathsf{at}$

1/50000 dilution

 $\textbf{Lanes 3-4}: \ \mathsf{Goat}\ \mathsf{Anti}\text{-}\mathsf{Rabbit}\ \mathsf{lgG}\ \mathsf{H\&L}\ (\mathsf{HRP})\ (\underline{\textbf{ab97051}})\ \mathsf{at}$

1/100000 dilution

Developed using the ECL technique.

Predicted band size: 8 kDa **Observed band size:** 15 kDa

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

Exposure times:

Lane 1: 32 seconds

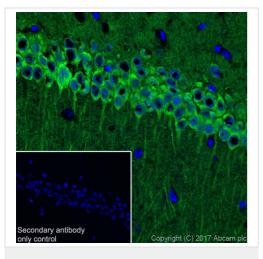
Lane 2: 101 seconds

Lane 3: 85 seconds

Lane 4: 3 minutes

The observed molecular mass is consistent with the literature (PMID 17505539).

The blot was developed on a BIO-RAD[®] ChemiDoc™ MP instrument.

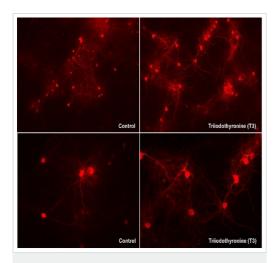


Immunohistochemistry (Frozen sections) - Anti-Neurogranin antibody [EPR21152] (ab217672)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse hippocampus CA1 tissue labeling Neurogranin with ab217672 at 1/3000 dilution (green), followed by **ab150077** AlexaFluor[®]488 Goat anti-Rabbit secondary at a 1/1000 dilution. Positive staining in the stratum pyramidal neurons of hippocampus CA1 on mouse brain (PMID: 15389631; 21516261) is observed. Counter stained with DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> AlexaFluor[®]488 Goat anti-Rabbit used at a 1/1000 dilution.

Perform heat-mediated antigen retrieval by using sodium citrate buffer (10 mM citrate pH 6.0 + 0.05% Tween-20)



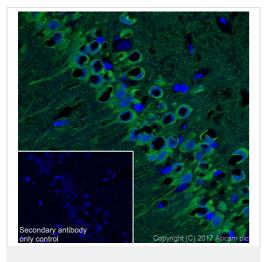
Immunocytochemistry/ Immunofluorescence - Anti-Neurogranin antibody [EPR21152] (ab217672) Image courtesy of Ms. Babben Tinner, QBM Cell

Science.

Immunocytochemistry/ Immunofluorescence analysis of primary rat cortical neurons labeling Neurogranin with ab217672 at 1/1500. The cells were fixed with 4% paraformaldehyde containing 0.2% picric acid in 0.1M phosphate buffer, pH 6.9 for 20 minutes. Permeabilization was with 0.3% Triton-X 100 in PBS (PBSTx). ab150068 at 1/200 was used as the secondary antibody

The rat cortical neurons were cultured for 29 days *in vitro*. They were either left untreated (Control) or treated beginning on the 10th day with 60ng/mL triiodothyronine (T3), to enhance neurogranin expression.

The cells were visualized with an inverted microscope at 10X magnification (upper panels) or 20X magnification (lower panels).

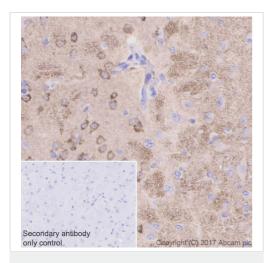


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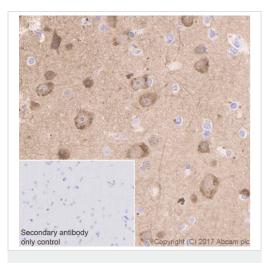


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[EPR21152] (ab217672)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling Neurogranin with ab217672 at 1/5000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Mainly cytoplasmic staining on mouse cerebrum (PMID: 26076492) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit lgG H&L (HRP).

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

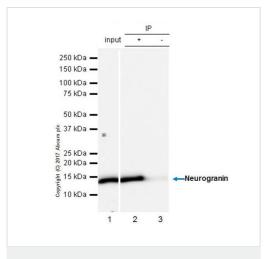


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Neurogranin antibody
[EPR21152] (ab217672)

Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling Neurogranin with ab217672 at 1/5000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Mainly cytoplasmic but also weak nuclear staining on human cerebrum (PMID: 26076492; PMID: 21516261) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit lgG H&L (HRP).

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).



Immunoprecipitation - Anti-Neurogranin antibody [EPR21152] (ab217672)

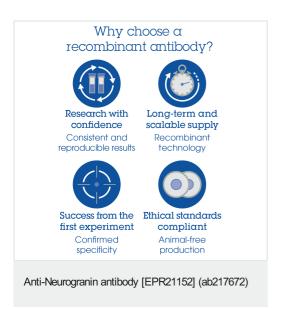
Neurogranin was immunoprecipitated from 0.35 mg mouse cerebral cortex lysate with ab217672 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab217672 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5,000 dilution.

Lane 1: Mouse cerebral cortex lysate 10 µg (Input).

Lane 2: ab217672 IP in mouse cerebral cortex lysate (+).

Lane 3: Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab217672 in mouse cerebral cortex lysate (-).

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 15 seconds.



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