abcam

Product datasheet

Anti-CaMKII alpha (phospho T286) antibody [EPR1830] ab124880

重组 RabMAb

★★★★★ <u>1 Abreviews</u> 9 References

概述

产品名称 Anti-CaMKII alpha (phospho T286)抗体[EPR1830]

兔单克隆抗体[EPR1830] to CaMKII alpha (phospho T286) 描述

宿主 Rabbit

特异性 Due to the homology between the immunogen peptide and other CAMKII isoforms, ab124880

may cross react with CAMKII delta (KCC2D, 93% homology) and CAMKII gamma (KCC2G, 79%

homology)

适用于: WB, IHC-P 经测试应用

不适用于: ICC/IF or IP

种属反应性 与反应: Mouse, Rat

不与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 IHC: mouse cerebellum, rat cerebellum. WB: untreated mouse brain tissue lysate, untreated rat

brain tissue 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.

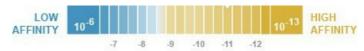
性能

形式

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 3.60 \times 10^{-11} M$ 解离常数(Kn)

10-11



Learn more about K_D

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS

纯**度** Protein A purified

克隆 单克隆

克隆编号 EPR1830

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab124880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	****(1)	1/4000. Detects a band of approximately 45-70 kDa (predicted molecular weight: 54 kDa).
IHC-P		1/5000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

应用说明 Is unsuitable for ICC/IF or IP.

靶标

功能 CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in

long-term potentiation and neurotransmitter release. Member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic

plasticity.

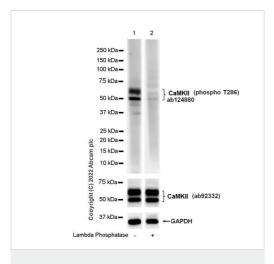
序列相似性 Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily.

Contains 1 protein kinase domain.

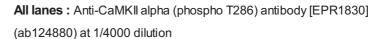
细胞定位 Cell junction > synapse > presynaptic cell membrane. Cell junction > synapse. Postsynaptic lipid

rafts.

图片



Western blot - Anti-CaMKII alpha (phospho T286) antibody [EPR1830] (ab124880)



Lane 1: Rat brain tissue lysate (untreated membrane)

Lane 2 : Rat brain tissue lysate (Lambda phosphatase treated membrane)

Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 54 kDa **Observed band size:** 50,54 kDa

Exposure time: 92 seconds

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

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All lanes : Anti-Myogenin antibody [EPR4789] (<u>ab124800</u>) at 1/4000 dilution

Lane 1: Mouse brain tissue lysate (untreated membrane)

Lane 2 : Mouse brain tissue lysate (Lambda phosphatase treated membrane)

Lysates/proteins at 20 µg per lane.

Western blot - Anti-CaMKII alpha (phospho T286) antibody [EPR1830] (ab124880)

Secondary

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

Predicted band size: 54 kDa **Observed band size:** 50,54 kDa

Exposure time: 15 seconds

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

Immunohistochemical analysis of Paraffin-embedded sections Rat Cerebellum tissue labelling CaMKII (pT286) with ab124880 at 1/5000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (ab209101)(Ready to use). Rat cerebellum without Lambda Protein Phosphatase treatment staining on Rat Cerebellum is observed. Counterstained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (ab209101)(Ready to use).

Positive staining on rat cerebellum without Lambda Protein Phosphatase treatment (image A); No signal was detected when

The section was incubated with ab124880 for 30 mins at room temperature.

tissues were treated with Lambda Protein Phosphatase (image B).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

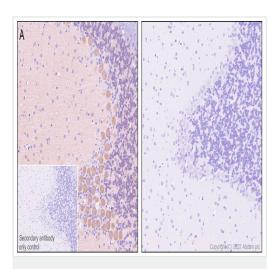
Heat mediated antigen retrieval with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins.

Immunohistochemical analysis of Paraffin-embedded sections
Mouse Cerebellum tissue labelling CaMKII (pT286) with ab124880
at 1/5000 dilution, followed by Rabbit specific IHC polymer
detection kit HRP/DAB (ab209101) at Ready to use dilution. Mouse
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staining on Mouse Cerebellum is observed. Counterstained with
Hematoxylin.

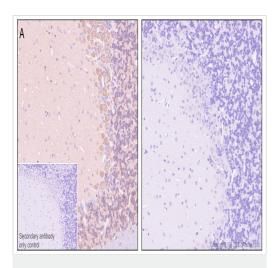
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (abab209101) at Ready to use dilution. Positive staining on mouse cerebellum without Lambda Protein Phosphatase treatment (image A); No signal was detected when tissues were treated with Lambda Protein Phosphatase (image B).

The section was incubated with ab124880 for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CalMKII alpha (phospho T286) antibody [EPR1830] (ab124880)



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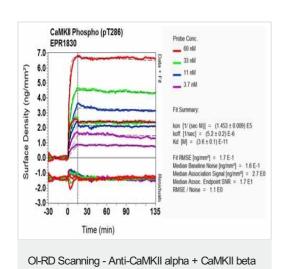
BOND® RX instrument.

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins.

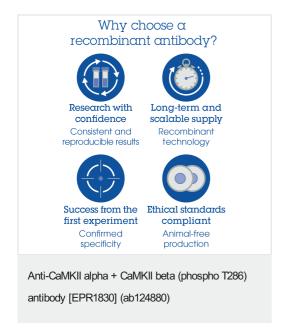
Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about KD



(phospho T286) antibody [EPR1830] (ab124880)



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