

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

リコンビナント RabMAb

★★★★★ **1 Abreviews** **9 References** **画像数 6**

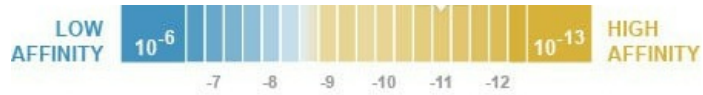
### 製品の概要

製品名	Anti-CaMKII alpha (phospho T286) antibody [EPR1830]
製品の詳細	Rabbit monoclonal [EPR1830] to CaMKII alpha (phospho T286)
由来種	Rabbit
特異性	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)
アプリケーション	<b>適用あり:</b> WB, IHC-P <b>適用なし:</b> ICC/IF or IP
種交差性	<b>交差種:</b> Mouse, Rat <b>非交差種:</b> Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	IHC: mouse cerebellum, rat cerebellum. WB: untreated mouse brain tissue lysate, untreated rat brain tissue lysate.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
解離定数 (K <sub>D</sub> 値)	K <sub>D</sub> = 3.60 x 10 <sup>-11</sup> M

10<sup>-11</sup>



[Learn more about K<sub>D</sub>](#)

バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
精製度	Protein A purified
ポリモノ	モノクローナル
クローン名	EPR1830
アイソタイプ	IgG

### 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ab124880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。

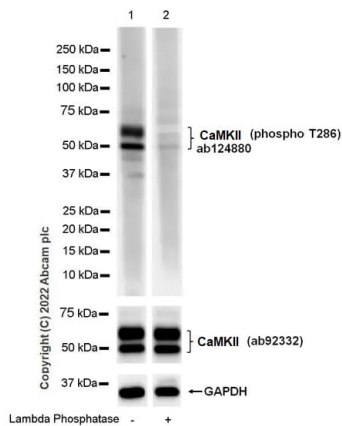
アプリケーション	Abreviews	特記事項
WB	★★★★★ (1)	1/4000. Detects a band of approximately 45-70 kDa (predicted molecular weight: 54 kDa).
IHC-P		1/5000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**追加情報**      Is unsuitable for ICC/IF or IP.

### ターゲット情報

<b>機能</b>	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.
<b>配列類似性</b>	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily. Contains 1 protein kinase domain.
<b>細胞内局在</b>	Cell junction > synapse > presynaptic cell membrane. Cell junction > synapse. Postsynaptic lipid rafts.

### 画像



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

**All lanes :** Anti-CaMKII alpha (phospho T286) antibody [EPR1830] (ab124880) at 1/4000 dilution

**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

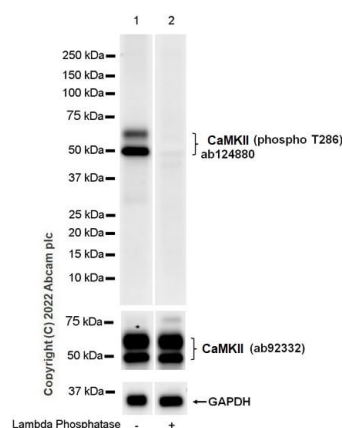
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 54 kDa

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

**Exposure time:** 92 seconds

**Blocking and diluting buffer and concentration:** 5% NFDm/TBST



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

**All lanes :** Anti-Myogenin antibody [EPR4789] ([ab124800](#)) 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.

### Secondary

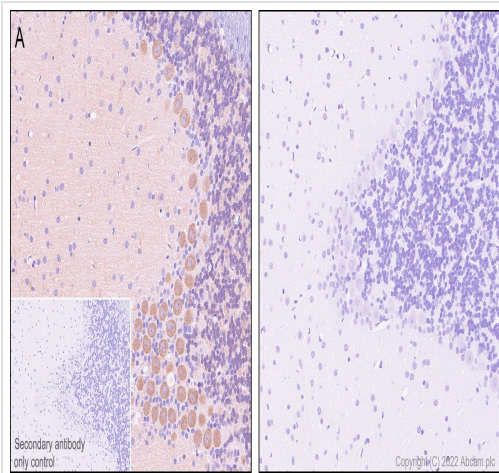
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 54 kDa

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

**Exposure time:** 15 seconds

**Blocking and diluting buffer and concentration:** 5%  
NFDm/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CaMKII alpha (phospho T286) antibody [EPR1830] (ab124880)

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.

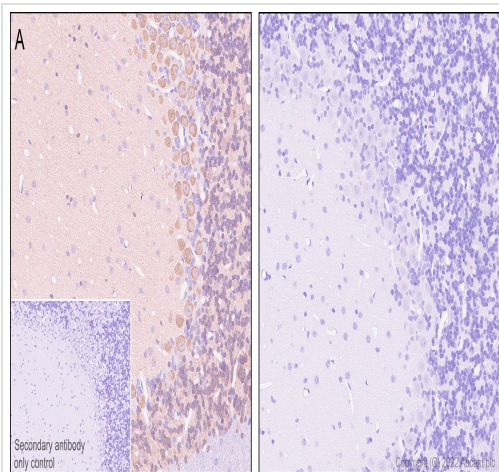
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**)(Ready to use).

Positive staining on rat cerebellum without Lambda Protein Phosphatase treatment (image A); No signal was detected when 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 BOND<sup>®</sup> RX instrument.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CaMKII alpha (phospho T286) antibody [EPR1830] (ab124880)

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 cerebellum without Lambda Protein Phosphatase treatment 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.

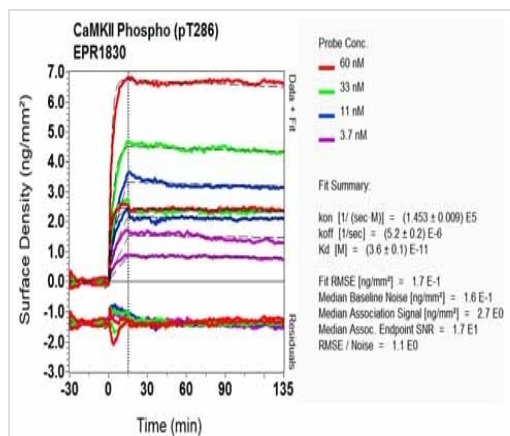
Positive staining on mouse cerebellum without Lambda Protein Phosphatase treatment (image A); No signal was detected when tissues were treated with Lambda Protein Phosphatase (image B).

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

The immunostaining was performed on a Leica Biosystems

BOND® RX instrument.

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



OI-RD Scanning - Anti-CaMKII alpha + CaMKII beta  
(phospho T286) antibody [EPR1830] (ab124880)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

Why choose a recombinant antibody?

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

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

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors