

### Anti-CaMKII delta antibody [EPR13095] ab181052

敲除验证
重组
RabMAb

★★★★★
[1 Abreviews](#)
[22 References](#)
[8 图像](#)

#### 概述

产品名称	Anti-CaMKII delta抗体[EPR13095]
描述	兔单克隆抗体[EPR13095] to CaMKII delta
宿主	Rabbit
特异性	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
经测试应用	<b>适用于:</b> WB, IHC-P <b>不适用于:</b> ICC/IF
种属反应性	<b>与反应:</b> Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HEK-293T, HAP1, SW480, A431 and HeLa whole cell lysate ( <a href="#">ab150035</a> ); Mouse heart tissue lysate; Rat spleen tissue lysate. IHC-P: Human thyroid carcinoma, cardiac and skeletal muscle tissues.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>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>.</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 long term. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
纯度	Protein A purified
克隆	单克隆

克隆编号EPR13095

同种型IgG

应用

The Abpromise guarantee      **Abpromise™**承诺保证使用ab181052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。

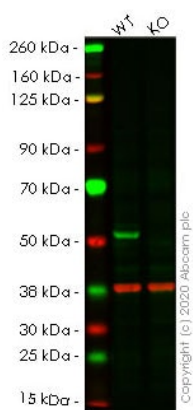
应用	Ab评论	说明
WB	★★★★★ (1)	1/1000 - 1/2000. Detects a band of approximately 50 kDa (predicted molecular weight: 56 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.

应用说明      Is unsuitable for ICC/IF.

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.
组织特异性	Expressed in cardiac muscle and skeletal muscle. Isoform Delta 3, isoform Delta 2, isoform Delta 8 and isoform Delta 9 are expressed in cardiac muscle. Isoform Delta 11 is expressed in skeletal muscle.
序列相似性	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily. Contains 1 protein kinase domain.

图片



Western blot - Anti-CaMKII delta antibody  
[EPR13095] (ab181052)

**All lanes :** Anti-CaMKII delta antibody [EPR13095] (ab181052) at 1/1000 dilution

**Lane 1 :** Wild-type HEK-293T cell lysate

**Lane 2 :** CAMK2D knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

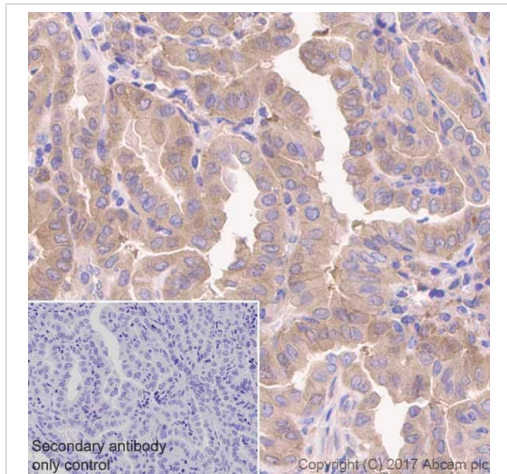
Performed under reducing conditions.

**Predicted band size:** 56 kDa

**Observed band size:** 50 kDa

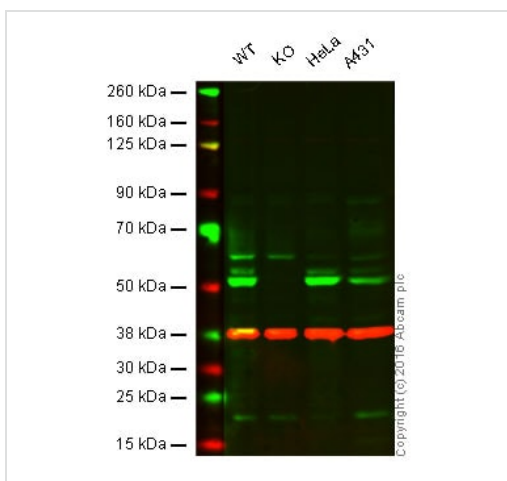
**Lanes 1- 2:** Merged signal (red and green). Green - ab181052 observed at 50 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

ab181052 was shown to react with CaM-kinase II in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line [ab267322](#) (knockout cell lysate [ab257376](#)) was used. Wild-type HEK-293T and CAMK2D knockout HEK-293T cell lysates were subjected to SDS-PAGE. ab181052 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CaMKII delta antibody [EPR13095] (ab181052)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human thyroid carcinoma tissue sections labeling CaMKII delta with Purified ab181052 at 1:100 dilution (1.82 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-CaMKII delta antibody [EPR13095] (ab181052)

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

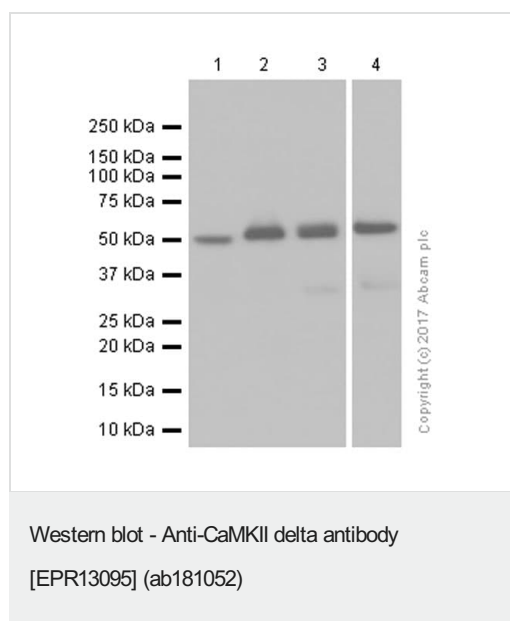
**Lane 2:** CaMKII delta knockout HAP1 cell lysate (20 µg)

**Lane 3:** HeLa cell lysate (20 µg)

**Lane 4:** A431 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab181052 observed at 56 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

Unpurified ab181052 was shown to recognize CaMKII delta when CaMKII delta knockout samples were used, along with additional cross-reactive bands. Wild-type and CaMKII delta knockout samples were subjected to SDS-PAGE. ab181052 and **ab8245** (loading control to GAPDH) were diluted 1/1000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



**Lane 1 :** Anti-CaMKII delta antibody [EPR13095] (ab181052) at 1/1000 dilution

**Lanes 2-4 :** Anti-CaMKII delta antibody [EPR13095] (ab181052) at 1/1000 dilution (purified)

**Lane 1 :** HeLa ( Human cervix adenocarcinoma epithelial cell) whole cell lysates at 15 µg

**Lane 2 :** SW480 (Human colorectal adenocarcinoma epithelial cell) whole cell lysates at 20 µg

**Lane 3 :** Mouse heart lysates at 20 µg

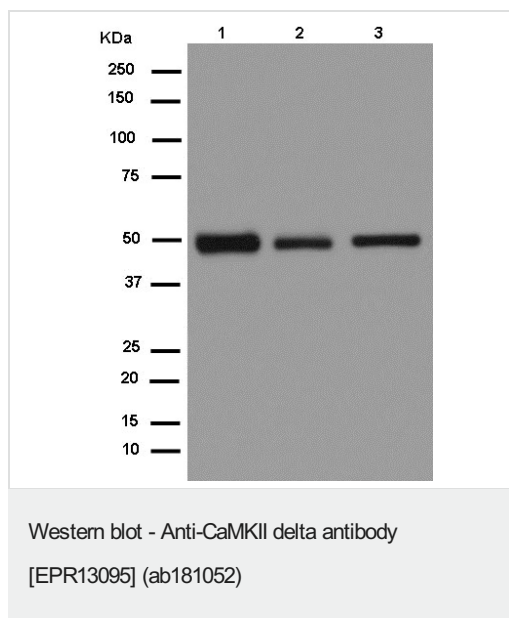
**Lane 4 :** Rat spleen lysates at 20 µg

## Secondary

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

**Predicted band size:** 56 kDa

Blocking and diluting buffer : 5% NFDM/TBST



**All lanes :** Anti-CaMKII delta antibody [EPR13095] (ab181052) at 1/2000 dilution (unpurified)

**Lane 1 :** SW480 whole cell lysate

**Lane 2 :** A431 whole cell lysate

**Lane 3 :** HeLa whole cell lysate

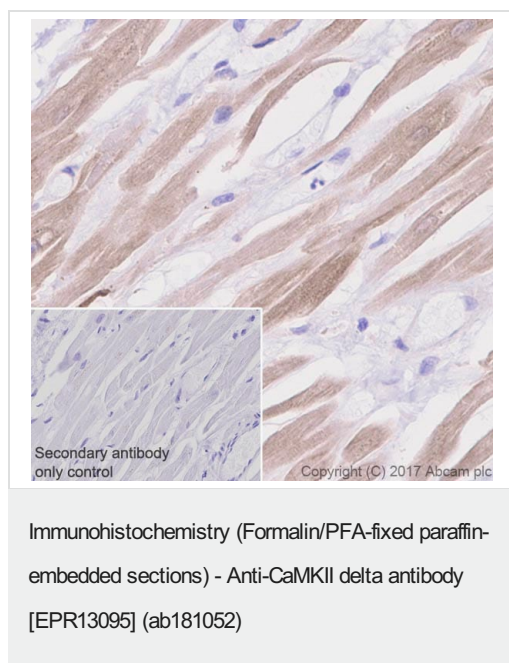
Lysates/proteins at 20 µg per lane.

### Secondary

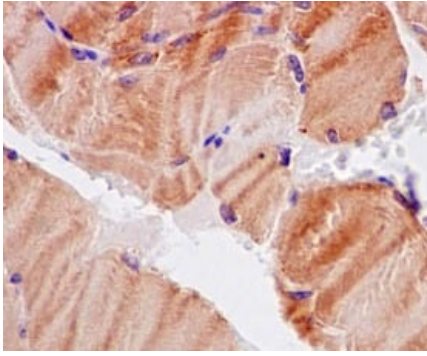
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 56 kDa

Blocking/ Dilution buffer: 5% NFDM /TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human cardiac muscle tissue sections labeling CaMKII delta with Purified ab181052 at 1:100 dilution (1.82 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemical analysis of paraffin embedded Human skeletal muscle tissue sections labeling CaMKII delta using unpurified ab181052 at a 1/100 dilution. A ready to use HRP Polymer for Rabbit IgG was used as the secondary. Hematoxylin counterstain. Heat mediated antigen retrieval was performed citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CaMKII delta antibody [EPR13095] (ab181052)

Why choose a recombinant antibody?



Anti-CaMKII delta antibody [EPR13095] (ab181052)

**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.cn/abpromise> or contact our technical team.

### Terms and conditions

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