

# **Product datasheet**

# Anti-CaMKII delta antibody [EPR13095] - BSA and Azide free ab191588

**敲除 验证** 重组 RabMAb

## 6 图**像**

概述	
产品名称	Anti-CaMKII delta <b>抗体</b> [EPR13095] - BSA and Azide free
描述	兔单克隆抗体[EPR13095] to CaMKII delta - BSA and Azide free
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 <b>用</b>	适用于: WB, IHC-P
<b>种属反</b> 应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>阳性</b> 对照	WB: HEK-293T, SW480, A431 and HeLa whole cell lysate. IHC-P: Human thyroid, cardiac and skeletal muscle tissue.
常规说明	ab191588 is the carrier-free version of <b>ab181052</b> .
	Our <b><u>carrier-free</u></b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.
	Use our <b><u>conjugation kits</u></b> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.
	This product is compatible with the Maxpar <sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. $Maxpar^{\mathbb{R}}$ is a trademark of Fluidigm Canada Inc.
	Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><u>RabMAb<sup>®</sup> patents</u></b> .

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2 Constituent: PBS
无载体	是
纯 <b>度</b>	Protein A purified
克隆	单 <b>克隆</b>
克 <b>隆</b> 编号	EPR13095
同种型	lgG

#### 应用

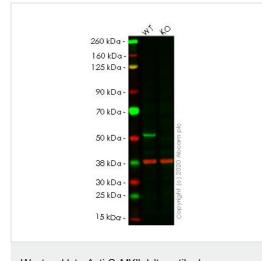
### The Abpromise guarantee Abpromise™承诺保证使用ab191588于以下的经测试应用

### "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		Use at an assay dependent concentration. Detects a band of approximately 50 kDa (predicted molecular weight: 56 kDa). Can be blocked with <u>ab188479</u>
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

<b>靶</b> 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 <b>特异性</b>	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] - BSA and Azide free (ab191588) **All lanes :** Anti-CaMKII delta antibody [EPR13095] (<u>ab181052</u>) 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.

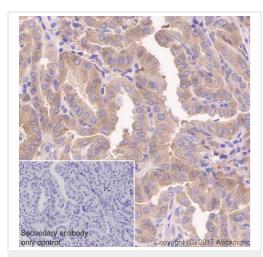
Performed under reducing conditions.

Predicted band size: 56 kDa Observed band size: 50 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab181052</u>).

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

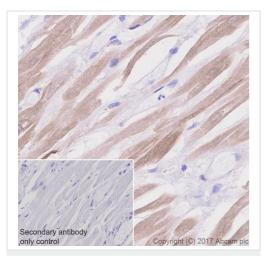
<u>ab181052</u> was shown to react with CaM-kinase II in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line <u>ab267322</u> (knockout cell lysate <u>ab257376</u>) was used. Wild-type HEK-293T and CAMK2D knockout HEK-293T cell lysates were subjected to SDS-PAGE.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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CaMKII delta antibody [EPR13095] - BSA and Azide free (ab191588)

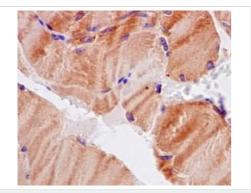
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human thyroid carcinoma tissue sections labeling CaMKII delta with Purified <u>ab181052</u> at 1:100 dilution (1.82 µg/ml). Heat mediated antigen retrieval was performed using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0). Tissue 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab181052</u>).

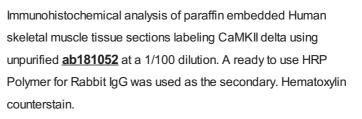


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CaMKII delta antibody [EPR13095] - BSA and Azide free (ab191588) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human cardiac muscle tissue sections labeling CaMKII delta with Purified <u>ab181052</u> at 1:100 dilution (1.82 µg/ml). Heat mediated antigen retrieval was performed using <u>ab93684</u> (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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181052**).

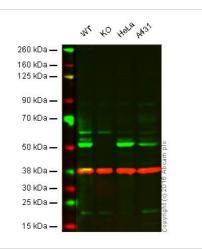


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CaMKII delta antibody [EPR13095] - BSA and Azide free (ab191588)



This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab181052</u>).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-CaMKII delta antibody [EPR13095] - BSA and Azide free (ab191588)

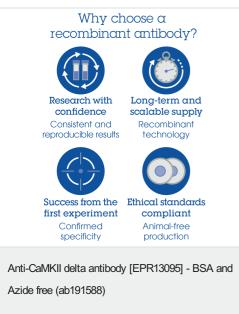
This WB data was generated using the same anti-CAKII delta antibody clone [EPR13095] in a different buffer formulation (cat# **ab181052**).

- 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  $\mu g)$

Lane 4: A431 cell lysate (20 µg)

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

**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<sup>®</sup> 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



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