abcam

Product datasheet

Anti-CPT2 antibody [EPR13626] - C-terminal ab181114

敲除验证 重组 RabMAb

1 Abreviews 21 References 13 图像

概述

产品名称	Anti-CPT2抗体[EPR13626] - C-terminal
描述	兔单克隆抗体[EPR13626] to CPT2 - C-terminal
宿主	Rabbit
经测试应用	**适用于:** IHC-P, WB, ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HAP1, HeLa, MCF7 whole cell lysates; Mouse heart and kidney tissue lysates; kidney and liver tissue lysates; Human fetal kidney and liver tissue lysates ICC/IF: MCF7 cells IHC-P: Rat colon; Mouse kidney; Human liver carcinoma and skeletal muscle.
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	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: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR13626
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab181114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
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
WB		1/1000 - 1/10000. Detects a band of approximately 67 kDa (predicted molecular weight: 74 kDa).
ICC/IF		1/50 - 1/100.

靶标

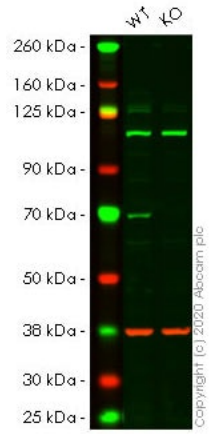
通路 Lipid metabolism; fatty acid beta-oxidation.

疾病相关 Defects in CPT2 are the cause of carnitine palmitoyltransferase 2 deficiency (CPT2D) [MIM:255110, 600649]; also known as CPT-II deficiency or CPT2 deficiency. CPT2D is an autosomal recessive disorder characterized by recurrent myoglobinuria, episodes of muscle pain, stiffness, and rhabdomyolysis. These symptoms are triggered by prolonged exercise, fasting or viral infection and patients are usually young adults. In addition to this classical, late-onset, muscular type, a hepatic or hepatocardiomuscular form has been reported in infants. Clinical pictures in these children or neonates include hypoketotic hypoglycemia, liver dysfunction, cardiomyopathy and sudden death.
Defects in CPT2 are the cause of carnitine palmitoyltransferase 2 deficiency, lethal neonatal (CPT2D-LN) [MIM:608836]; also known as lethal neonatal CPT-II deficiency. It is a lethal neonatal form of CPT2D. This rarely presentation is antenatal with cerebral periventricular cysts and cystic dysplastic kidneys. The clinical variability of the disease is likely attributed to the variable residual enzymatic activity.

序列相似性 Belongs to the carnitine/choline acetyltransferase family.

细胞定位 Mitochondrion inner membrane.

图片



Western blot - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

All lanes : Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : CPT2 knockout HeLa cell lysate

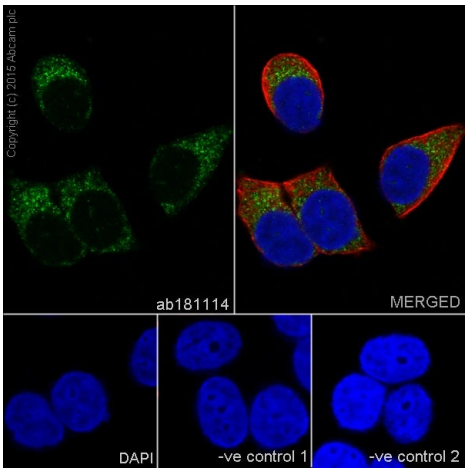
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 74 kDa
Observed band size: 74 kDa

Lanes 1- 2: Merged signal (red and green). Green - ab181114 observed at 74 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

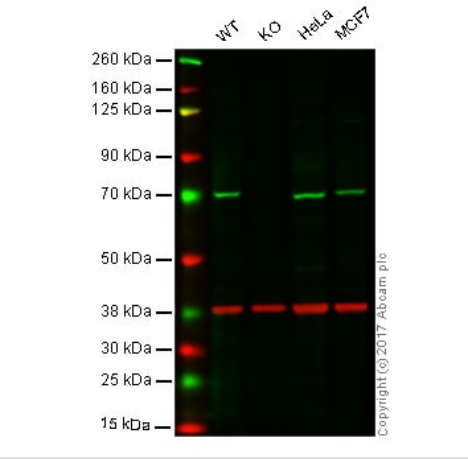
ab181114 was shown to react with CPT2/CPT1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab265931** (knockout cell lysate **ab257180**) was used. Wild-type HeLa and CPT2 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab181114 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.



Immunocytochemistry/ Immunofluorescence - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

Immunocytochemistry/Immunofluorescence analysis of MCF-7 (human breast carcinoma) cells labelling CPT2 with purified ab181114 at 1/100. Cells were fixed with 100% methanol and permeabilized with 0.1% Triton X-100. **ab150077**, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. The cells were co-stained with **ab7291**, a mouse anti-tubulin antibody (1/1000) using **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) as the secondary. Nuclei couterstained with DAPI (blue).

For negative control 1, rabbit primary antibody was used, followed by anti-mouse secondary antibody (**ab150120**). For negative control 2, mouse primary antibody (**ab7291**) was used followed by anti-rabbit secondary antibody (**ab150077**).



Western blot - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

All lanes : Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate
Lane 2 : CPT2 knockout HAP1 whole cell lysate
Lane 3 : HeLa whole cell lysate
Lane 4 : MCF7 whole cell lysate

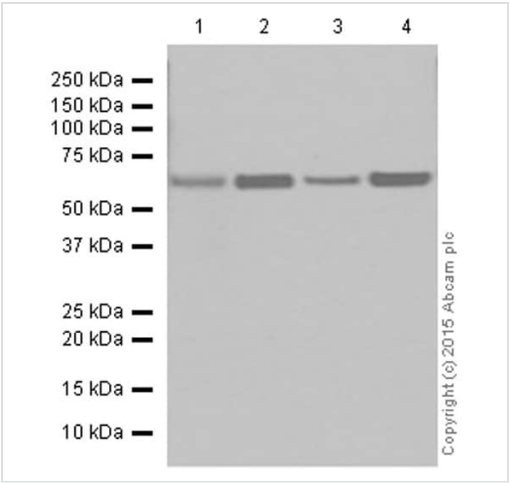
Lysates/proteins at 20 µg per lane.

Predicted band size: 74 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab181114 observed at 70 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab181114 was shown to specifically react with CPT2 in wild-type HAP1 cells. No band was observed when CPT2 knockout samples were examined. Wild-type and CPT2 knockout samples were subjected to SDS-PAGE. Ab181114 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD)

preabsorbed **ab216776** secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

All lanes : Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114) at 1/2000 dilution (purified)

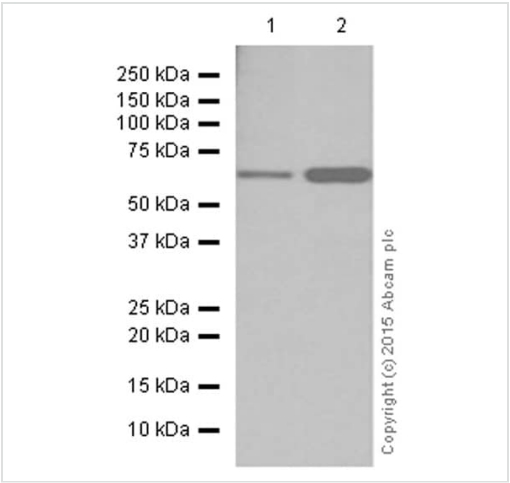
Lane 1 : Human fetal kidney tissue lysate
Lane 2 : MCF-7 (human breast carcinoma) whole cell lysate
Lane 3 : Mouse heart tissue lysate
Lane 4 : Mouse kidney tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 74 kDa
Observed band size: 67 kDa

Blocking and diluting buffer 5% NFDM/TBST



Western blot - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

All lanes : Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114) at 1/1000 dilution (purified)

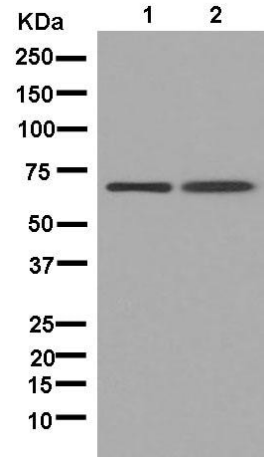
Lane 1 : Rat kidney tissue lysate
Lane 2 : Rat liver tissue lysate

Lysates/proteins at 20 µg per lane.

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

Predicted band size: 74 kDa
Observed band size: 67 kDa

Blocking and diluting buffer 5% NFDM/TBST



Western blot - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

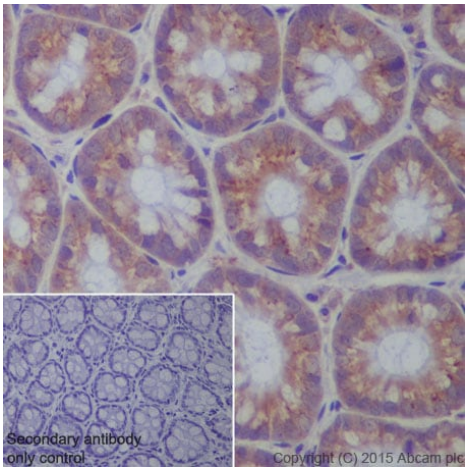
All lanes : Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114) at 1/10000 dilution (unpurified)

Lane 1 : Human fetal liver tissue lysate
Lane 2 : Human fetal kidney tissue lysate

Lysates/proteins at 20 µg per lane.

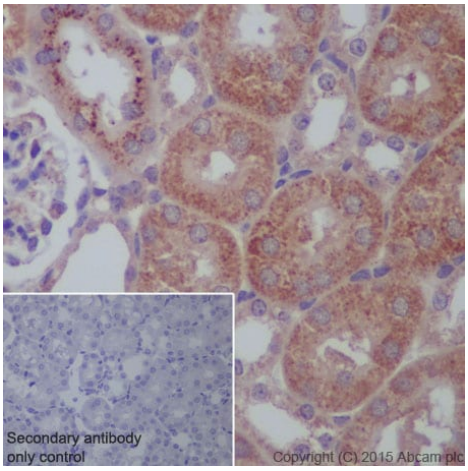
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab136636**) at 1/500 dilution

Predicted band size: 74 kDa
Observed band size: 67 kDa



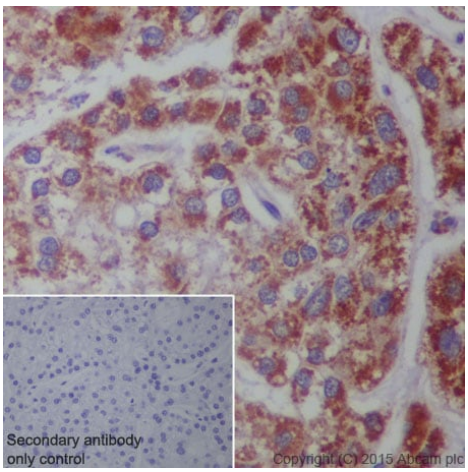
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

Immunohistochemical analysis of paraffin embedded rat colon tissue section labelling CPT2 with purified ab181114 at dilution of 1/50. The secondary antibody used was HRP-conjugated Goat Anti-Rabbit IgG H&L (**ab97051**) at dilution of 1/500. The sample was counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



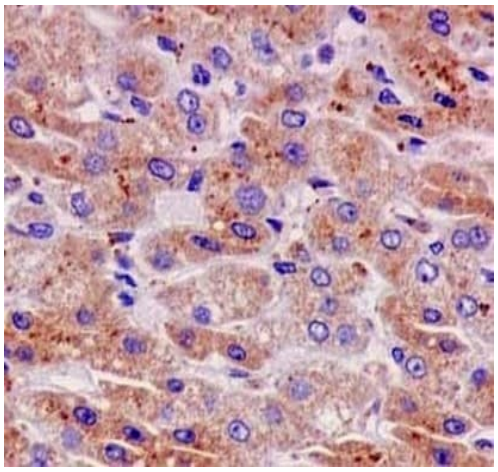
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

Immunohistochemical analysis of paraffin embedded mouse kidney tissue section labelling CPT2 with purified ab181114 at dilution of 1/50. The secondary antibody used was HRP-conjugated Goat Anti-Rabbit IgG H&L (**ab97051**) at dilution of 1/500. The sample was counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



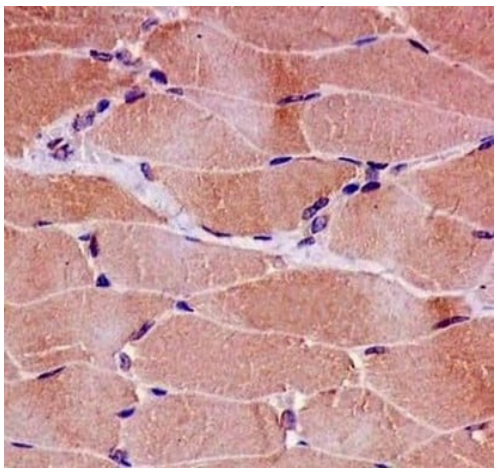
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

Immunohistochemical analysis of paraffin embedded human liver carcinoma tissue section labelling CPT2 with purified ab181114 at dilution of 1/50. The secondary antibody used was Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**), at a dilution of 1/500. The sample was counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



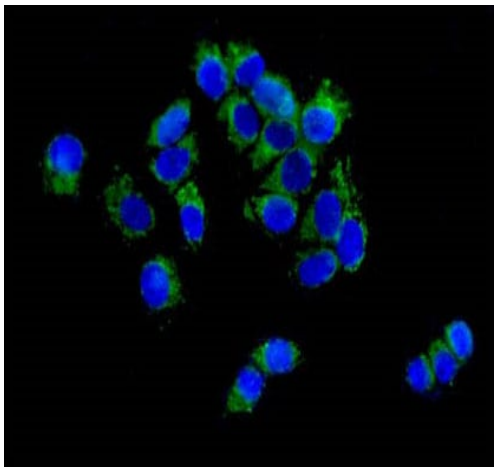
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling CPT2 with unpurified ab181114 at 1/100 dilution, followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue labeling CPT2 with unpurified ab181114 at 1/100 dilution, followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

Immunofluorescent analysis of 4% paraformaldehyde-fixed MCF7 cells labeling CPT2 with unpurified ab181114 at 1/100 dilution, followed by Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody at 1/200 dilution. Counter stained with Dapi.

Anti-CPT2 antibody [EPR13626] - C-terminal (ab181114)

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