# abcam

### Product datasheet

## Anti-CPT2 antibody [1C2AE6] ab110293

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概述

产品名称 Anti-CPT2抗体[1C2AE6]

描述 小鼠单克隆抗体[1C2AE6] to CPT2

**宿主** Mouse

经测试应用 适用于: IHC-P, ICC/IF, Flow Cyt, IP

不适用于: WB

种属反应性与反应: Mouse, Rat, Cow, Human

免疫原 Synthetic peptide. This information is considered to be commercially sensitive.

阳性对照 HepG2 cells. HL-60 cells. Human normal colon FFPE tissue

常规说明

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact  $\underline{\text{orders@abcam.com}}.$ 

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Product was previously marketed under the MitoSciences sub-brand.

性能

形式 Liquid

**存放**说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**存储溶液** pH: 7.5

Preservative: 0.02% Sodium azide
Constituent: HEPES buffered saline

纯**度** Ammonium Sulphate Precipitation

纯**化**说明 Purity near homogeneity as judge by SDS-PAGE. The antibody was produced in-vitro using

hybridomas grown in serum-free medium and then purified by biochemical fractionation.

**克隆** 单克隆

1

**克隆编号** 1C2AE6

同种型 lgG1

轻链类型 kappa

应用

#### The Abpromise guarantee

Abpromise™承诺保证使用ab110293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		Use a concentration of 10 µg/ml.
ICC/IF		Use a concentration of 4 µg/ml.
Flow Cyt		Use a concentration of 1 $\mu$ g/ml. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.

应用说明

Is unsuitable for WB.

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.

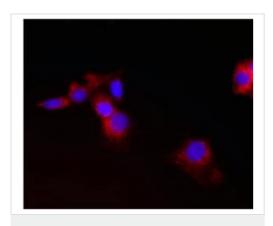
序列相似性

Belongs to the carnitine/choline acetyltransferase family.

细胞定位

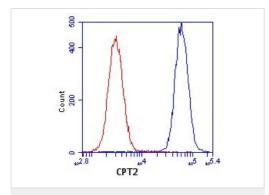
Mitochondrion inner membrane.

图片



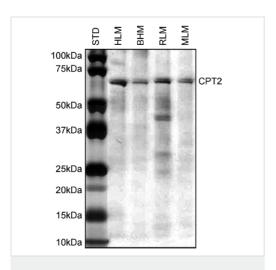
Immunocytochemistry/ Immunofluorescence - Anti-CPT2 antibody [1C2AE6] (ab110293)

Immunocytochemistry image of ab110293 stained Human HepG2 cells. The cells were paraformaldehyde fixed (4%, 20 min) and Triton X-100 permeabilized (0.1%, 15 min). The cells were incubated with ab110293 at 4 µg/ml for 2h at room temperature, or over night at 4°C. The secondary antibody was (red) Alexa Fluor® 594 goat anti-mouse lgG (H+L) used at a 1/1000 dilution for 1h. 10% Goat serum was used as the blocking agent for all blocking steps. DAPI was used to stain the cell nuclei (blue). Target protein locates mainly in mitochondria.



Flow Cytometry - Anti-CPT2 antibody [1C2AE6] (ab110293)

HL-60 cells were stained with 1  $\mu$ g/mL of ab110293 (blue) or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.



Immunoprecipitation - Anti-CPT2 antibody [1C2AE6] (ab110293)

SDS-PAGE analysis of IP samples. As an IP antibody, ab110293 works with human, bovine, rat, and mouse samples.

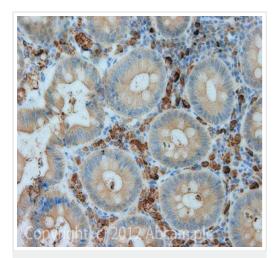
Lane STD: Molecular weight ladder

Lane HLM: Human liver mitochondria

Lane BHM: Bovine heart mitochondria

Lane RLM: Rat liver mitochondria

Lane MLM: Mouse liver mitochondria



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CPT2 antibody [1C2AE6] (ab110293)

IHC image of CPT2 staining in Human normal colon formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab110293, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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