abcam

Product datasheet

Human CPT1A knockout HEK-293T cell lysate ab256880

4 图像

概述

产品概述

Knockout cell lysate achieved by CRISPR/Cas9.

Parental Cell Line HEK293T
Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, 17 bp deletion in exon 3 and Insertion of the selection

cassette in exon 3.

Passage number <20

Knockout validation Sanger Sequencing, Western Blot (WB)

Reconstitution notesTo use as WB control, resuspend the lyophilizate in 50 μL of LDS* Sample Buffer to have a final

concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M

DTT.

*Usage of SDS sample buffer is not recommended with these lyophilized lysates.

说明

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease

inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found **here**. Please refer to our lysis protocol for further details on how our lysates are

prepared.

User storage instructions: Lyophilizate may be stored at 4°C. After reconstitution, store at -

20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

See here for more information on knockout cell lysates.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of

products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH

Authorisation, and any other relevant authorisations, for their intended uses.

This product is subject to limited use licenses from The Broad Institute, ERS Genomics Limited and Sigma-Aldrich Co. LLC, and is developed with patented technology. For full details of the

licenses and patents please refer to our limited use license and patent pages.

经测试应用 适用于: WB

1

性能

存放说明

Store at -80°C. Please refer to protocols.

组 件	1 kit
ab260932 - Human CPT1A knockout HEK293T cell lysate	1 x 100µg
ab255553 - Human wild-type HEK293T cell lysate	1 x 100µg

Cell type epithelial

STR Analysis Amelogenin X D5S818: 8, 9 D13S317: 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 16, 19 TH01:

7, 9.3 TPOX: 11 CSF1PO: 11, 12

靶标

组织特异性 Strong expression in kidney and heart, and lower in liver and skeletal muscle.

通路 Lipid metabolism; fatty acid beta-oxidation.

疾病相关 Defects in CPT1A are the cause of carnitine palmitoy/transferase 1A deficiency (CPT1AD)

[MIM:255120]; also known as CPT-I deficiency or CPT1A deficiency. CPT1AD is a rare

autosomal recessive metabolic disorder of long-chain fatty acid oxidation characterized by severe episodes of hypoketotic hypoglycemia usually occurring after fasting or illness. Onset is in infancy

or early childhood.

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

细胞定位 Mitochondrion outer membrane.

应用

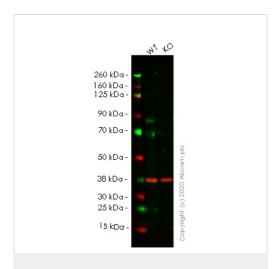
The Abpromise guarantee

Abpromise™承诺保证使用ab256880于以下的经测试应用

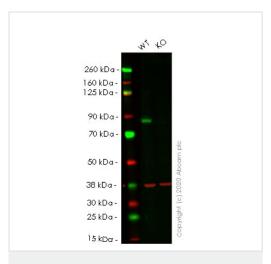
"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 88 kDa.

图片



Western blot - Human CPT1A knockout HEK293T cell lysate (ab256880)



Western blot - Human CPT1A knockout HEK293T cell lysate (ab256880)

Lane 1: Wild-type HEK-293T cell lysate (20µg)

Lane 2: CPT1A knockout HEK-293T cell lysate (20µg)

Lanes 1-2: Merged signal (red and green). Green - <u>ab234111</u> observed at 88 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

ab234111 Anti-CPT1A antibody [EPR21843-71-2F] was shown to specifically react with CPT1A in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line ab266319 (knockout cell lysate ab256880) was used. Wild-type and CPT1A knockout samples were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab234111 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 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.

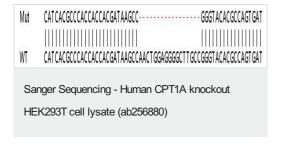
Lane 1: Wild-type HEK-293T cell lysate (20µg)

Lane 2: CPT1A knockout HEK-293T cell lysate (20µg)

Lanes 1-2: Merged signal (red and green). Green - <u>ab220789</u> observed at 88 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

<u>ab220789</u> Anti-CPT1A antibody [EPR21843-71-1C] was shown to specifically react with CPT1A in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line <u>ab266319</u> (knockout cell lysate ab256880) was used. Wild-type and CPT1A knockout samples were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. <u>ab220789</u> and Anti-GAPDH

antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4 °C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Allele-1: 17 bp deletion in exon 3

Mut GCCCACCACCACGATAAGCC****Insertion*****AACTGGAGGGGCTTGCCGGG				
WT	GCCCACCACCACGATAAGCC	AACT GGAGGGGCTT GCC GGG		
Sanger Sequencing - Human CPT1A knockout				
HEK293T cell lysate (ab256880)				

Allele-2: Insertion of the selection cassette in exon 3

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