Product datasheet

Anti-CPT1A antibody ab83862

Overview

Product name: Anti-CPT1A antibody
Description: Rabbit polyclonal to CPT1A
Host species: Rabbit
Tested applications: Suitable for: ICC/IF, WB
Species reactivity: Reacts with: Human, Predicted to work with: Mouse, Rat, Sheep, Rabbit, Horse, Chicken, Guinea pig, Cow, Cat, Dog, Pig, Drosophila melanogaster, Zebrafish
Immunogen: Synthetic peptide corresponding to a region within the internal sequence amino acids 684-733 (LSTSQTPQQQ VELFDLENNP EYVSSGGGFG PVADDGYGVS YILVGENLIN) of human CPT1A (NP_001027017).
Positive control: DU145 cell line IF/ICC 293T cell lysate

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer: Preservative: 0.09% Sodium azide
Constituents: 2% Sucrose, PBS
Purity: Immunogen affinity purified
Purification notes: ab83862 is purified by peptide affinity chromatography method.
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab83862 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
**Tissue specificity**
Strong expression in kidney and heart, and lower in liver and skeletal muscle.

**Pathway**
Lipid metabolism; fatty acid beta-oxidation.

**Involvement in disease**
Defects in CPT1A are the cause of carnitine palmitoyltransferase 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.

**Sequence similarities**
Belongs to the carnitine/choline acetyltransferase family.

**Cellular localization**
Mitochondrion outer membrane.

**Application**

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<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 1 µg/ml.</td>
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<tr>
<td>WB</td>
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<td>Use a concentration of 1 µg/ml. Predicted molecular weight: 88 kDa. Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T.</td>
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**Target**

**Images**

Western blot analysis of Capan1 (lane 1) and HPAF (lane 2) cell lysates (45µg/lane) labeling CPT1A with ab83862 at 1:1000. A HRP-conjugated anti-rabbit (1:5000) was used as the secondary antibody.
Anti-CPT1A antibody (ab83862) at 1 µg/ml (in 5% skim milk / PBS buffer) + 293T cell lysate at 10 µg

**Secondary**

HRP conjugated anti-Rabbit IgG at 1/50000 dilution

**Predicted band size:** 88 kDa

**Observed band size:** 88 kDa

12% gel concentration

ICC/IF image of ab83862 stained DU145 cells. The cells were 4% formladehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab83862, 1µg/ml) overnight at +4°C. The secondary antibody (green) was ab96899, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Sample Type : Human Capan1 cells (Pancreatic cancer cell line).


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