

Basic Information

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|--------------------|---|------------|--|
| Product Name | Anti-CPT1B Antibody | | |
| Gene Name | CPT1B | | |
| Source | Rabbit | | |
| Clonality | Polyclonal | | |
| Isotype | IgG | | |
| Species Reactivity | human, mouse, rat, monkey | | |
| Tested Application | WB, ICC/IF, FCM, ELISA | | |
| Contents | 500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol. | | |
| Immunogen | E.coli-derived human CPT1B recombinant protein (Position: R180-S772). | | |
| Concentration | 500 ug/ml | | |
| Purification | Immunogen affinity purified. | | |
| Observed MW | 88 kDa | | |
| Dilution Ratios | Western blot (WB): | 1:500-2000 | |
| | Immunocytochemistry/Immunofluorescence (ICC/IF): | 1:50-400 | |
| | Flow Cytometry (Fixed): | 1:50-200 | |
| | Enzyme linked immunosorbent assay (ELISA): | 1:100-1000 | |

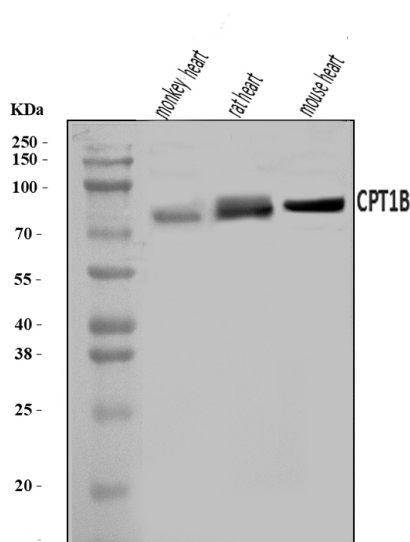
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

CPT1B is located on 22q13.33. The protein encoded by this gene, a member of the carnitine/ choline acetyltransferase family, is the rate-controlling enzyme of the long-chain fatty acid beta-oxidation pathway in muscle mitochondria. This enzyme is required for the net transport of long-chain fatty acyl-CoAs from the cytoplasm into the mitochondria. Multiple transcript variants encoding different isoforms have been found for this gene, and read-through transcripts are expressed from the upstream locus that include exons from this gene.

Selected Validation Data



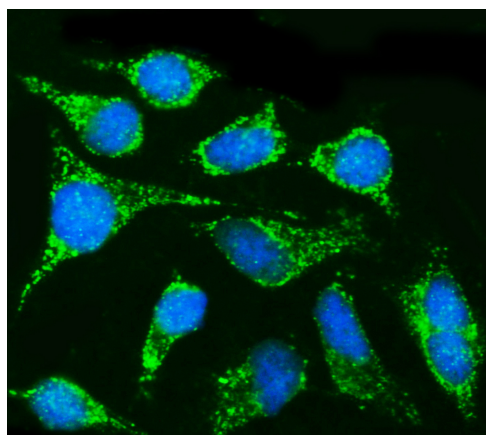
Western blot analysis of CPT1B using anti-CPT1B antibody (A03558). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: monkey heart tissue lysates,

Lane 2: rat heart tissue lysates,

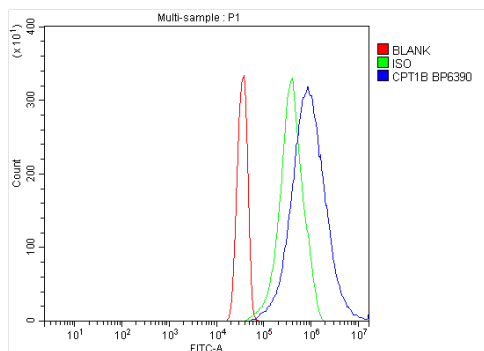
Lane 3: mouse heart tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CPT1B antigen affinity purified polyclonal antibody (A03558) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CPT1B at approximately 88 kDa. The expected band size for CPT1B is at 88 kDa.



IF analysis of CPT1B using anti-CPT1B antibody (A03558).

CPT1B was detected in an immunocytochemical section of HeLa cells. The section was incubated with rabbit anti-CPT1B Antibody (A03558) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of HeLa cells using anti-CPT1B antibody (A03558).

Overlay histogram showing HeLa cells stained with A03558 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CPT1B Antibody (A03558) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.