**CPT1A Monoclonal antibody**

**Catalog Number:** 66039-1-Ig  
**4 Publications**

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### Basic Information

- **Catalog Number:** 66039-1-lg  
- **Size:** 150UL, Concentration: 1000 μg/ml by Bradford method using BSA as the standard.  
- **Source:** Mouse  
- **Isotype:** IgG2a  
- **Immunogen Catalog Number:** AG7745  

- **GenBank Accession Number:** BC000185  
- **GeneID (NCBI):** 1374  
- **Full Name:** carnitine palmitoyltransferase 1A (liver)  
- **Calculated MW:** 88 kDa  
- **Observed MW:** 86 kDa  

- **Purification Method:** Protein A purification  
- **CloneNo.:** 5D8G9  

**Recommended Dilutions:**  
- **WB:** 1:1000-1:4000  
- **IP:** 0.5-4.0 ug for IP and 1:500-1:1000 for WB  
- **IHC:** 1:200-1:800

- **Applications Tested:** FC, IHC, IP, WB, ELISA  
- **Cited Applications:** IHC, WB  

**Species Specificity:** human, mouse, rat  
**Cited Species:** human, mouse

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### Applications

- **Tested Applications:**  
- **IHC, WB**  
- **Cited Applications:** IHC, WB

**Species Specificity:** human, mouse, rat  
**Cited Species:** human, mouse

**Note-IHC:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

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### Background Information

CPT1A, also named as CPT1, CPT1-L and L-CPT1, belongs to the carnitine/choline acetyltransferase family. Carnitine palmitoyltransferase (CPT) deficiencies are common disorders of mitochondrial fatty acid oxidation. The CPT system is made up of two separate proteins located in the outer (CPT1) and inner (CPT2) mitochondrial membranes. CPT1A is an active forms of related liver-type carnitine palmitoyltransferase I. ([PMID: 11001805]). CPT1A deficiency presents as recurrent attacks of fasting hypoketotic hypoglycemia. ([PMID: 15363638]). This antibody can bind the close sequences genes.

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### Notable Publications

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<th>Author</th>
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<tr>
<td>Patrick Vancura</td>
<td>27727308</td>
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<td>Mohamed A Zayed</td>
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<td>Shuli Man</td>
<td>32613952</td>
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### Storage

- **Storage:** Store at -20°C. Stable for one year after shipment.  
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Aliquoting is unnecessary for -20°C storage

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For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintechn@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
A549 cells were subjected to SDS PAGE followed by western blot with 66039-1-Ig (CPT1A Antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66039-1-Ig (CPT1A antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66039-1-Ig (CPT1A antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

IP Result of anti-CPT1A (IP:66039-1-Ig, 4ug; Detection:66039-1-Ig 1:500) with MCF-7 cells lysate 1200ug.

1X10^6 HeLa cells were stained with 0.2ug CPT1A antibody (66039-1-Ig, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1500.