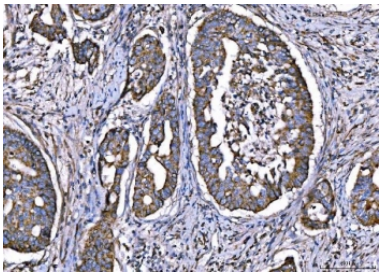
CPT1-L Antibody / CPT1A (RQ6854)

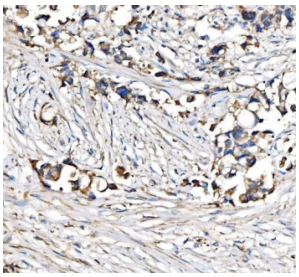
Catalog No.	Formulation	Size
RQ6854	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

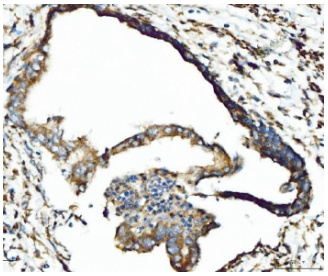
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P50416
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence (FFPE): 5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This CPT1-L antibody is available for research use only.



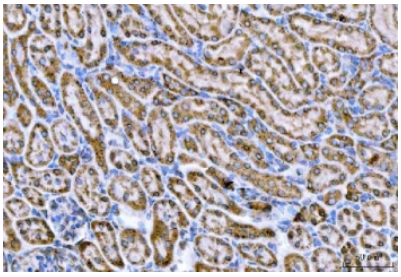
IHC staining of FFPE human adenocarcinoma of the right colon tissue with CPT1-L antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



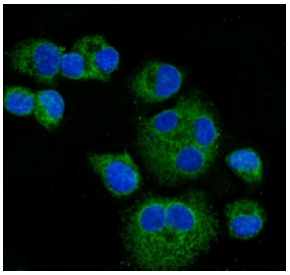
IHC staining of FFPE human breast cancer tissue with CPT1-L antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



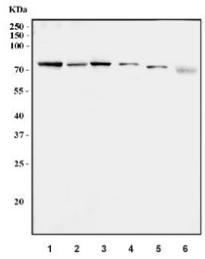
IHC staining of FFPE human cervical cancer tissue with CPT1-L antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



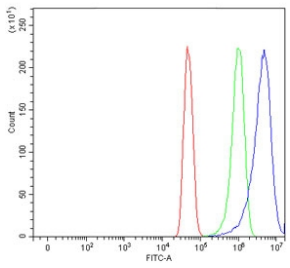
IHC staining of FFPE rat kidney tissue with CPT1-L antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human T-47D cells with CPT1-L antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human MCF7, 2) human RT-4, 3) rat liver, 4) rat kidney, 5) mouse liver and 6) mouse kidney tissue lysate with CPT1-L antibody. Predicted molecular weight ~86 kDa.



Flow cytometry testing of human U-251 cells with CPT1-L antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CPT1-L antibody.

Description

The mitochondrial oxidation of long-chain fatty acids is initiated by the sequential action of carnitine palmitoyltransferase I (which is located in the outer membrane and is detergent-labile) and carnitine palmitoyltransferase II (which is located in the inner membrane and is detergent-stable), together with a carnitine-acylcarnitine translocase. CPT I is the key enzyme in the carnitine-dependent transport across the mitochondrial inner membrane and its deficiency results in a decreased rate of fatty acid beta-oxidation. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Application Notes

Optimal dilution of the CPT1-L antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids M122-K556) was used as the immunogen for the CPT1-L antibody.

Storage

After reconstitution, the CPT1-L antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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