

For Research Use Only

CTP synthase Polyclonal antibody

Catalog Number: 15914-1-AP

Featured Product

21 Publications



Basic Information

Catalog Number:

15914-1-AP

Size:

600 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG8707

GenBank Accession Number:

BC009408

GeneID (NCBI):

1503

UNIPROT ID:

P17812

Full Name:

CTP synthase

Calculated MW:

591 aa, 67 kDa

Observed MW:

67 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:6000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:10-1:100

Applications

Tested Applications:

FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:

WB, IF, IHC, CoIP

Species Specificity:

human

Cited Species:

human, mosquito, mouse, zebrafish

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

Positive Controls:

WB : HEK-293 cells, HeLa cells, HepG2 cells, Raji cells

IP : HeLa cells,

IHC : human liver cancer tissue,

IF : HepG2 cells,

Background Information

CTP synthase(CTPS) is also named as CTPS1 and belongs to the CTP synthase family. It catalyses the ATP-dependent formation of CTP from UTP using either L-glutamine or NH₃ as the nitrogen source(PMID:12752439). It is important in the biosynthesis of phospholipids and nucleic acids, and plays a key role in cell growth, development, and tumorigenesis (PMID:8813694). CTP synthetase exists as a dimer in the absence of its substrates ATP and UTP, but in the presence of saturating concentrations of these substrates the enzyme exists as a tetramer. (PMID:18439916)

Notable Publications

Author	Pubmed ID	Journal	Application
Chia-Chun Chang	29097181	Exp Cell Res	IF
Yi-Fan Fang	36233000	Int J Mol Sci	IF
Otavio Cabral-Marques	31849949	Front Immunol	

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

For technical support and original validation data for this product please contact:

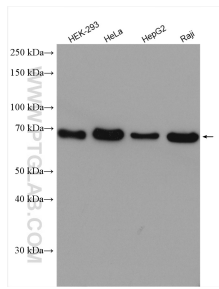
T: 4006900926

E: Proteintech-CN@ptglab.com

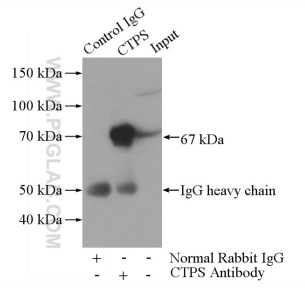
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

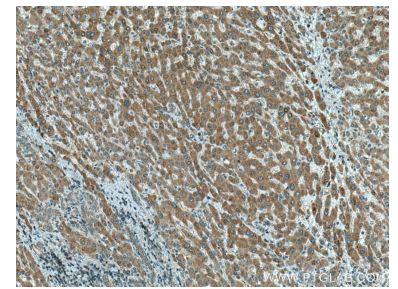
Selected Validation Data



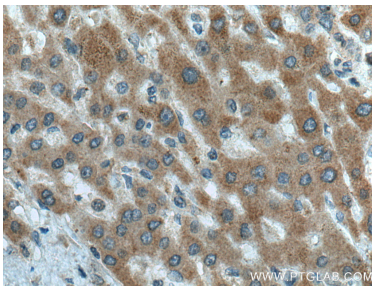
Various lysates were subjected to SDS PAGE followed by western blot with 15914-1-AP (CTP synthase antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



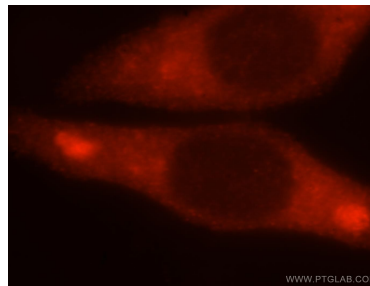
IP result of anti-CTP synthase (IP:15914-1-AP, 4ug; Detection:15914-1-AP 1:500) with HeLa cells lysate 1200ug.



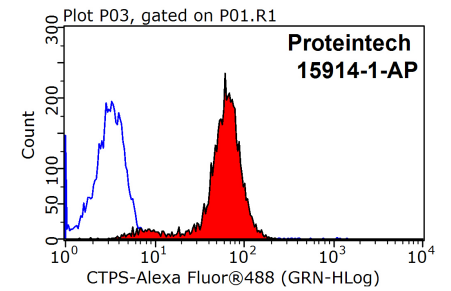
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 15914-1-AP (CTP synthase antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 15914-1-AP (CTP synthase antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HepG2 cells, using CTPS antibody 15914-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



1X10⁶ HepG2 cells were stained with 0.2ug CTP synthase antibody (15914-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.