

For Research Use Only

CTP synthase Polyclonal antibody

Catalog Number: 15914-1-AP

Featured Product

24 Publications



Basic Information

Catalog Number:

15914-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop and 267 ug/ml by Bradford method using BSA as the standard;

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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, CoIP

Species Specificity:

human

Cited Species:

human, mouse, zebrafish, mosquito

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/ICC: 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

*** 20ul sizes contain 0.1% BSA

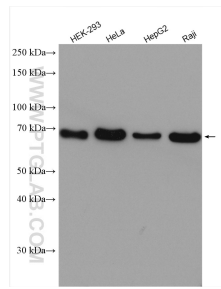
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

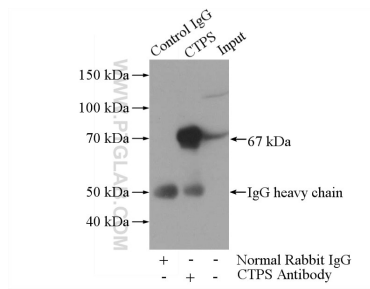
E: proteintech@ptglab.com
W: ptglab.com

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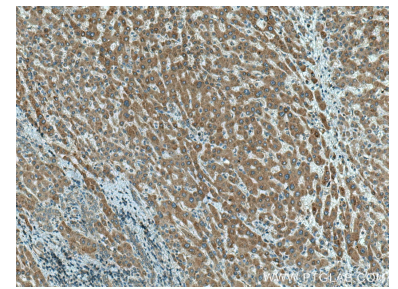
Selected Validation Data



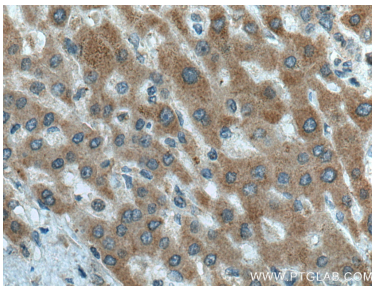
Various lysates were subjected to SDS PAGE followed by western blot with 15914-1-AP (CTP synthase antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



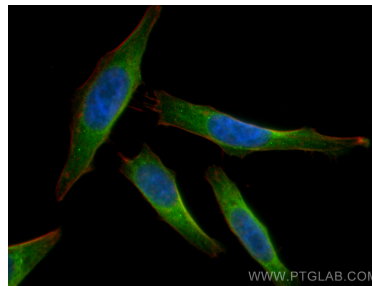
IP result of anti-CTP synthase (IP:15914-1-AP, 4ug; Detection:15914-1-AP 1:500) with HeLa cells lysate 1200ug.



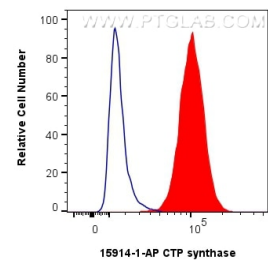
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 15914-1-AP (CTP synthase antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 (4% PFA) fixed HepG2 cells using CTP synthase antibody (15914-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



1x10⁶ HepG2 cells were intracellularly stained with 0.4 ug CTP synthase Polyclonal antibody (15914-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).