For Research Use Only

CTP synthase Polyclonal antibody

Catalog Number:15914-1-AP Featured Product 21 Publications

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Basic Information

Catalog Number:
15914-1-AP

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

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG8707

GenBank Accession Number:
BC009408

GeneID (NCBI):
1503

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 IP and 1:500-1:1000 for WB
IHC 1:50-1:500
IF 1:10-1:100

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
CoIP, IF, IHC, WB

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	

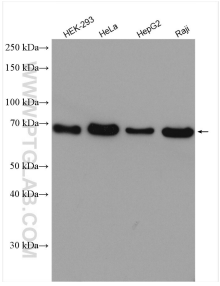
Storage

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

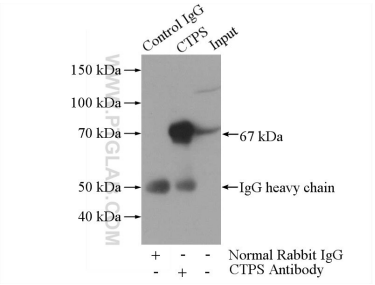
*** 20ul sizes contain 0.1% BSA

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

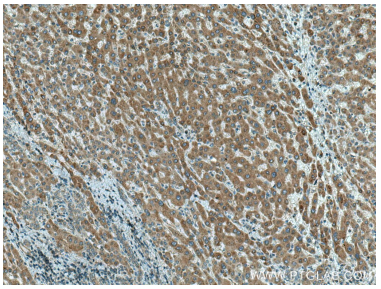
Selected Validation Data



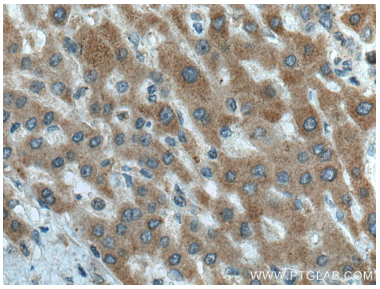
Various lysates were subjected to SDS PAGE followed by western blot with 15914-1-AP (CTP synthase antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



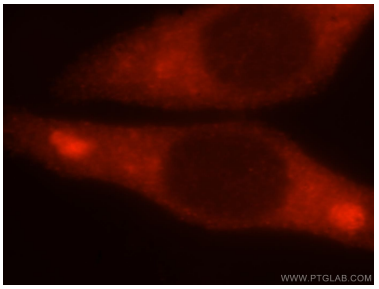
IP Result of anti-CTP synthase (IP:15914-1-AP, 4ug; Detection:15914-1-AP 1:500) with HeLa cells lysate 1200ug.



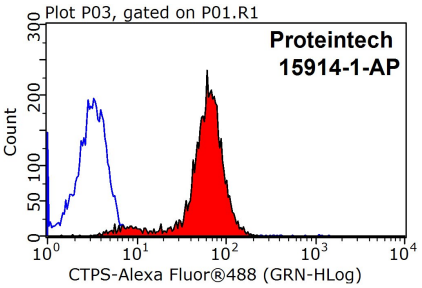
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 15914-1-AP (CTP synthase antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1X10^6 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.