

For Research Use Only

CPS1 Polyclonal antibody

Catalog Number: 18703-1-AP

Featured Product

18 Publications



Basic Information

Catalog Number:

18703-1-AP

Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC140943

GeneID (NCBI):

1373

UNIPROT ID:

P31327

Full Name:

carbamoyl-phosphate synthetase 1, mitochondrial

Calculated MW:

165 kDa

Observed MW:

140-165 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:14000

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF

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

Positive Controls:

WB : mouse liver tissue, HeLa cells, rat liver tissue

IHC : human liver cancer tissue,

IF/ICC : HepG2 cells,

Background Information

CPS1 is an enzyme that catalyzes the first committed step of the hepatic urea cycle, which is important in the removal of excess urea from cells. Expressed primarily in the liver and small intestine, CPS1 can be used as a marker for mitochondria in these tissues. In addition, CPS1 expression appears to be lost in adenocarcinomas of the small intestine. The antibody can recognize two isoforms of this gene around 165 kDa and 116 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Xi Liu	31565867	J Cell Mol Med	WB
Sung-Jae Cha	34799567	Nat Commun	IF
Yin Cao	30901224	J Proteome Res	WB, IHC

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

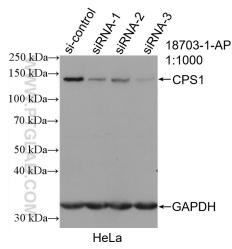
For technical support and original validation data for this product please contact:

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

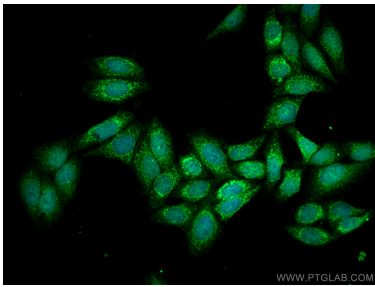
E: proteintech@ptglab.com
W: ptglab.com

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

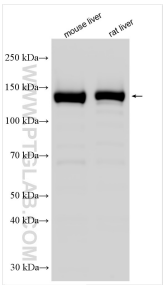
Selected Validation Data



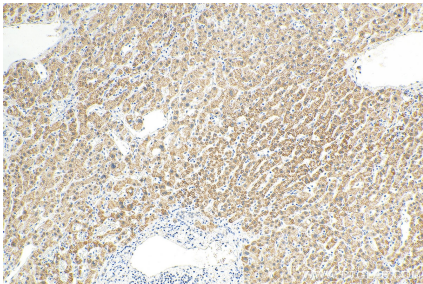
WB result of CPS1 antibody (18703-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CPS1 transfected HeLa cells.



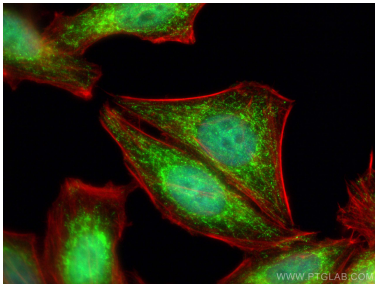
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CPS1 antibody (18703-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 18703-1-AP (CPS1 antibody) at dilution of 1:7000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 18703-1-AP (CPS1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CPS1 antibody (18703-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).