

For Research Use Only

CPS1 Polyclonal antibody

Catalog Number: 24513-1-AP



Basic Information

Catalog Number: 24513-1-AP	GenBank Accession Number: BC140943	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 400 ug/ml by Nanodrop and 280 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 1373	Recommended Dilutions: WB 1:500-1:2000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: P31327	
Isotype: IgG	Full Name: carbamoyl-phosphate synthetase 1, mitochondrial	
Immunogen Catalog Number: AG21605	Calculated MW: 1500 aa, 165 kDa	
	Observed MW: 140-165 kDa	

Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

human, mouse, rat

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 : HepG2 cells, HeLa cells, rat liver tissue, mouse liver tissue, LO2 cells

IHC : human liver cancer tissue,

Background Information

Carbamoyl phosphate synthetase 1 (CPS1) is the first rate-limiting enzyme in the urea cycle, converting ammonium into carbamoyl phosphate, and plays an intricate role in arginine metabolism and pyrimidine metabolism (PMID: 28376202). CPS1 expression is liver specific and suppressed in HCC cells and tumor tissues at the transcriptional level (PMID: 21281797). CPS1 gene comprises 38 exons that encode a polypeptide of 1500 amino acids and has a molecular weight of 165 kDa.

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

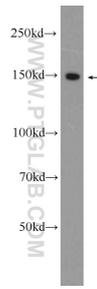
For technical support and original validation data for this product please contact:

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

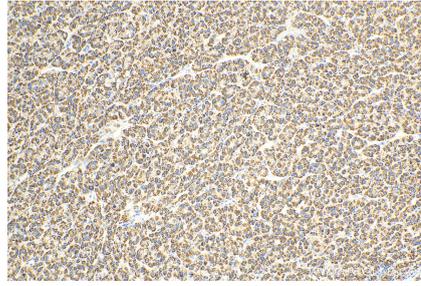
E: proteintech@ptglab.com
W: ptglab.com

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

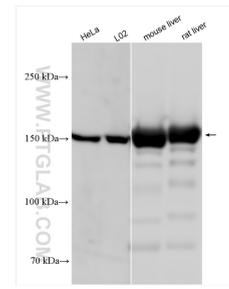
Selected Validation Data



HepG2 cells were subjected to SDS PAGE followed by western blot with 24513-1-AP (CPS1 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 24513-1-AP (CPS1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 24513-1-AP (CPS1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.