

For Research Use Only

# CPS1 Recombinant antibody

Catalog Number: 84277-1-RR



## Basic Information

Catalog Number:	84277-1-RR	GenBank Accession Number:	BC140943	Purification Method:	Protein A purification
Size:	1000 ug/ml	GeneID (NCBI):	1373	CloneNo.:	241198F1
Source:	Rabbit	UNIPROT ID:	P31327	Recommended Dilutions:	WB 1:500-1:2000
Isotype:	IgG	Full Name:	carbamoyl-phosphate synthetase 1, mitochondrial	IHC 1:200-1:800	IF/ICC 1:200-1:800
		Calculated MW:	165 kDa		
		Observed MW:	140-165 kDa		

## Applications

Tested Applications:	WB, IHC, IF/ICC, ELISA	Positive Controls:	
Species Specificity:	human, mouse, rat	WB :	HeLa cells, mouse liver tissue, rat liver tissue
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>		IHC :	mouse liver tissue,
		IF/ICC :	HepG2 cells,

## 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**

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

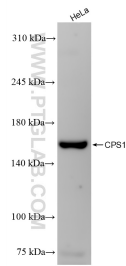
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

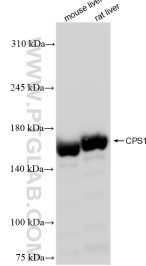
W: [ptgcn.com](http://ptgcn.com)

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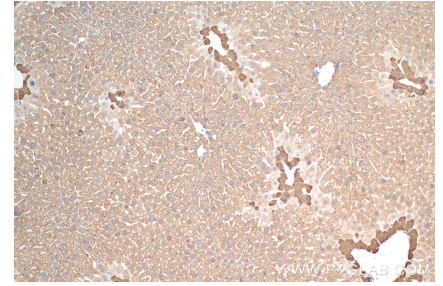
## Selected Validation Data



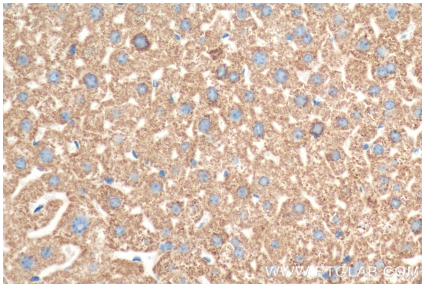
HeLa cells were subjected to SDS PAGE followed by western blot with 84277-1-RR (CPS1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



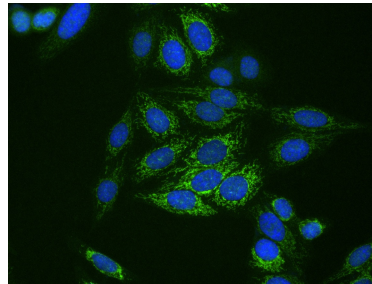
Various lysates were subjected to SDS PAGE followed by western blot with 84277-1-RR (CPS1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 84277-1-RR (CPS1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 84277-1-RR (CPS1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CPS1 antibody (84277-1-RR, Clone: 241198F1) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).