For Research Use Only

CPS1 Recombinant antibody

Catalog Number:84277-1-RR



Basic Information

Catalog Number: GenBank Accession Number:

84277-1-RR BC140943 Protein A purfication GeneID (NCBI): Size: CloneNo.:

100ul , Concentration: 250 µg/ml by 1373 241198F1

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Source: P31327 WB 1:500-1:2000 Rabbit IHC 1:200-1:800 Full Name: IF/ICC 1:200-1:800

Isotype: carbamoyl-phosphate synthetase 1, mitochondrial IgG

Calculated MW: 165 kDa Observed MW: 140-165 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA

Species Specificity: IHC: mouse liver tissue, 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: HeLa cells, mouse liver tissue, rat liver tissue

Purification Method:

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.

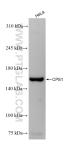
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

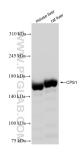
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data



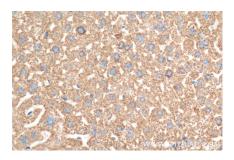
HeLa cells were subjected to SDS PAGE followed by western blot with 84277-1-RR (CPS1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



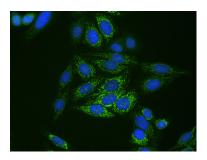
Various lysates were subjected to SDS PAGE followed by western blot with 84277-1-RR (CPS1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded 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 paraffinembedded 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).