

For Research Use Only

CPS1 Polyclonal antibody

Catalog Number: 24513-1-AP

Featured Product



Basic Information

Catalog Number:

24513-1-AP

Concentration:

400 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG21605

GenBank Accession Number:

BC140943

GeneID (NCBI):

1373

UNIPROT ID:

P31327

Full Name:

carbamoyl-phosphate synthetase 1, mitochondrial

Calculated MW:

1500 aa, 165 kDa

Observed MW:

140-165 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:2000

IHC: 1:50-1:500

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, mouse liver tissue, rat liver tissue, L02 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

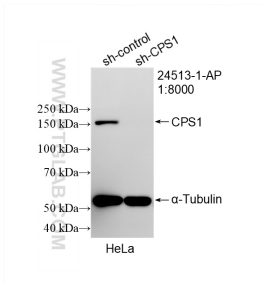
T: 4006900926

E: Proteintech-CN@ptglab.com

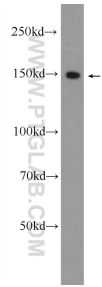
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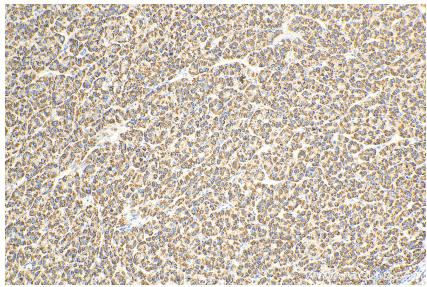
Selected Validation Data



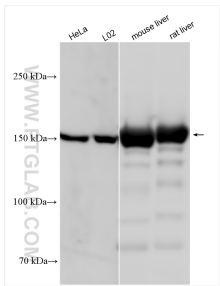
WB result of CPS1 antibody (24513-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CPS1 transfected HeLa cells.



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.