Product Datasheet

CPS1 Rabbit mAb

Catalog No: #49850

Package Size: #49850-1 50ul #49850-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

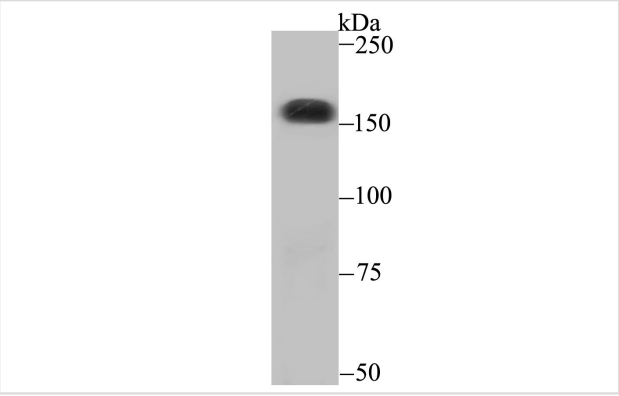
Description

Product Name	CPS1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JB40-33
Purification	ProA affinity purified
Applications	WB,ICC,IF,IHC,IP
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Recombinant protein
Other Names	Carbamoyl phosphate synthase [ammonia] antibody Carbamoyl phosphate synthase [ammonia] mitochondrial antibody Carbamoyl phosphate synthase antibody Carbamoyl phosphate synthetase 1 antibody Carbamoyl phosphate synthetase 1 mitochondrial antibody Carbamoyl phosphate synthetase I antibody Carbamoyl-phosphate synthase [ammonia] antibody Carbamoyl-phosphate synthetase I antibody Carbamoylphosphate synthase antibody Carbamoylphosphate synthetase 1 antibody Carbamoylphosphate synthetase I antibody CPS 1 antibody Cps1 antibody CPSase 1 antibody CPSase I antibody CPSASE1 antibody CPSM_HUMAN antibody mitochondrial antibody MS738 antibody
Accession No.	Swiss-Prot#:P31327
Uniprot	P31327
GeneID	1373;
Calculated MW	165 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

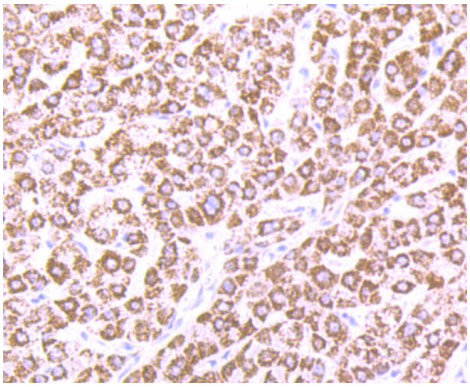
Application Details

WB: 1:500-1:1,000 IHC: 1:50-1:200 ICC: 1:50-1:200

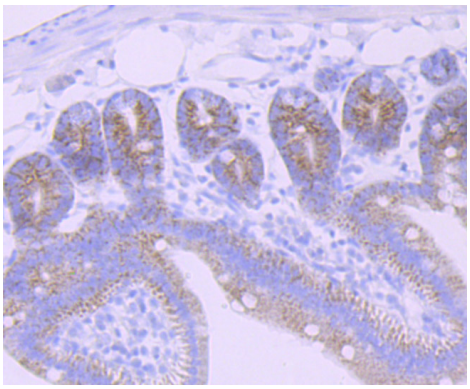
Images



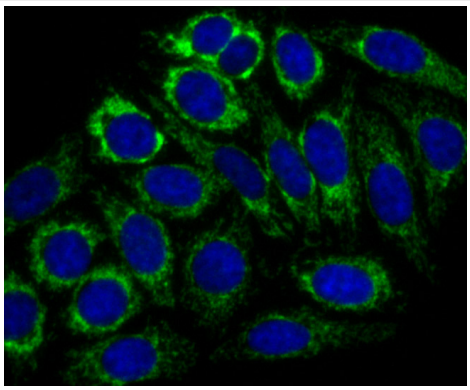
Western blot analysis of CPS1 on SiHa cell using anti-CPS1 antibody at 1/500 dilution.



Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-CPS1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue using anti-CPS1 antibody. Counter stained with hematoxylin.



ICC staining CPS1 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

The multicomplex protein, carbamoyl-phosphate synthetase-aspartate carbamoyl transferase-dihydro-orotase (CAD), consists of three distinct proteins, carbamoyl phosphate synthetase 2 (CPS2), aspartate transcarbamylase, and dihydro-orotase, which catalyze the second and third steps of pyrimidine biosynthesis. CAD is allosterically regulated by the phosphorylation of CPS2 by cyclic AMP-dependent protein kinase, and this activation enables CPS2 to catalyze the rate-limiting step of pyrimidine synthesis. CAD is expressed in brain and skeletal muscle. A related protein, carbamoyl phosphate synthetase 1 (CPS1) is expressed in liver. CPS1 catalyzes the rate-limiting step in the urea cycle, and deficiency of CPS1 is an autosomal recessive disorder that causes hyperammonemia.

References

Note: This product is for in vitro research use only