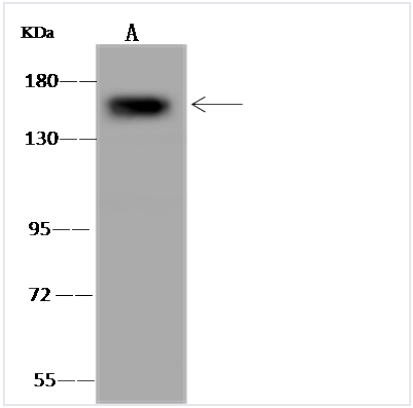
CPS1 Antibody – Rabbit Polyclonal

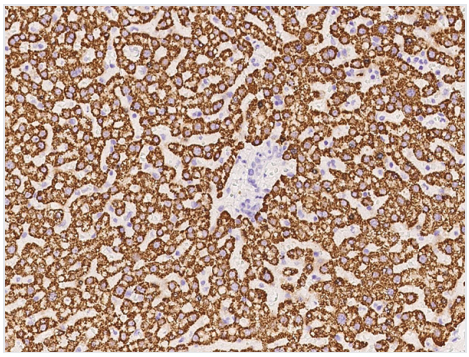
PRODUCT OVERVIEW

Product Name	CPS1, Polyclonal Antibody
Full Product Name	Anti-CPS1 Antibody, Rabbit Polyclonal
Product Gene Name	anti-CPS1 antibody
Product Synonym Names	CPS1 Antibody, Rabbit PAb, Antigen Affinity Purified
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid; PBS, pH7.0 with 0.03% Proclin300
Purity/Purification	Protein A & Antigen Affinity
Specificity	Human CPS1
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Avoid repeated freeze-thaw cycles.
Immunogen	E Coli-derived Human CPS1 fragment
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with E Coli-derived Human CPS1 fragment, and purified by antigen affinity chromatography.
Applications Tested/Suitable for anti-CPS1 antibody	Western Blot (WB), Immunohistochemistry-Paraffin (IHC-P), Immunoprecipitation (IP)
Application Notes for anti-CPS1 antibody	WB: 1:5000-1:20,000 IHC-P: 1:50-1:200 IP: 1-5uL/mg of lysate
Related Product Information for anti-CPS1 antibody	Carbamoyl phosphate synthetase-1 (CPS1), the first rate-limiting mitochondrial enzyme in the urea cycle, regulates proliferation and differentiation during tumor progression. KL cells express the urea cycle enzyme carbamoyl phosphate synthetase-1 (CPS1), which produces carbamoyl phosphate in the mitochondria from ammonia and bicarbonate, initiating nitrogen disposal. CPS1 is the major mitochondrial urea cycle enzyme in hepatocytes. It is released into the mouse and human blood during acute liver injury, where it has a short half-life. Carbamoyl phosphate synthetase 1 (CPS1) deficiency (CPS1D) is a rare autosomal recessive urea cycle disorder (UCD), which can lead to life-threatening hyperammonemia or severe neurological impairment. CPS1 catalyzes carbamoyl phosphate formation from ammonia, bicarbonate, and two molecules of ATP, and requires the allosteric activator N-acetyl-L-glutamate.
Product References and Citations for anti-CPS1 antibody	Wu G, et al. (2019) Expression and clinical significance of cps1 in glioblastoma multiforme. Curr Res Transl Med 67 (4): 123-128.Park MJ, et al. (2019) Constitutive release of cps1 in bile and its role as a protective cytokine during acute liver injury. Proc Natl Acad Sci U S A 116 (18): 9125-9134.Kim J, et al. (2019) Author correction: Cps1 maintains pyrimidine pools and DNA synthesis in kras/lkb1-mutant lung cancer cells. Nature 569 (7756): E4.Hu L, et al. (2014) Recurrence of carbamoyl phosphate synthetase 1 (cps1) deficiency in turkish patients: Characterization of a founder mutation by use of recombinant cps1 from insect cells expression. Mol Genet Metab 113 (4): 267-273.
Other Notes	Small volumes of anti-CPS1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

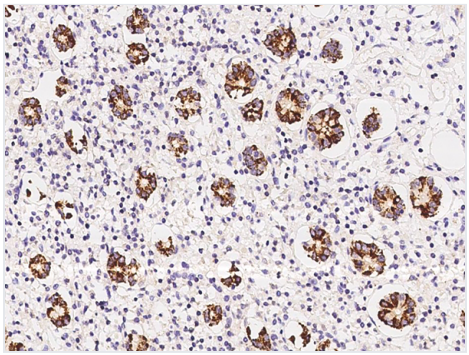
Searchable Terms for CPS1 purchase	MBS8109414 is an antibody targeting CPS1. Also known as Anti-CPS1 Antibody, Rabbit Polyclonal. Reactive in Human. Host: Rabbit.



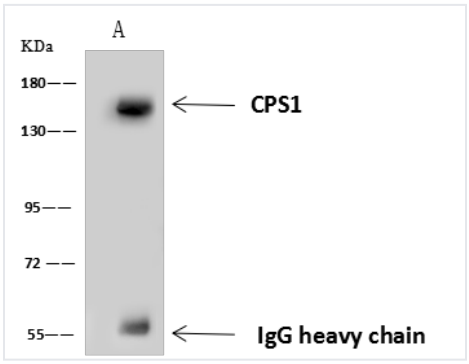
Western Blot (WB) of anti-CPS1 antibody
Anti-CPS1 rabbit polyclonal antibody at 1:5000 dilution Lane A: HeLa Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size:165 kDa



Immunohistochemistry (IHC) of anti-CPS1 antibody
Immunochemical staining of human CPS1 in human liver with rabbit polyclonal antibody at 1:100 dilution, formalin-fixed paraffin embedded sections.



Immunohistochemistry (IHC) of anti-CPS1 antibody
Immunochemical staining of human CPS1 in human small intestine with rabbit polyclonal antibody at 1:100 dilution, formalin-fixed paraffin embedded sections.



Immunoprecipitation (IP) of anti-CPS1 antibody
CPS1 was immunoprecipitated using: Lane A:0.5 mg HeLa Whole Cell Lysate 4 uL anti-CPS1 rabbit polyclonal antibody and 60 ug of Immunomagnetic beads Protein A/G. Primary antibody: Anti-CPS1 rabbit polyclonal antibody,at 1:100 dilution Secondary antibody: Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 165 kDa Observed band size :165 kDa

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CPS1. It may not necessarily be applicable to this product.

Protein Family	Carboxypeptidase
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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