

**CPS1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP16053a****Specification**

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**CPS1 Antibody (N-term) - Product Information**

|                   |  |
|-------------------|--|
| Application       | WB,E   |
| Primary Accession | <a href="#">P31327</a>   |
| Other Accession   | <a href="#">NP_001116105.1</a> , <a href="#">NP_001866.2</a> ,<br><a href="#">NP_001116106.1</a> |
| Reactivity        | Human  |
| Host              | Rabbit   |
| Clonality         | Polyclonal   |
| Isotype           | Rabbit IgG   |
| Antigen Region    | 262-291  |

**CPS1 Antibody (N-term) - Additional Information****Gene ID** 1373**Other Names**

Carbamoyl-phosphate synthase [ammonia], mitochondrial, Carbamoyl-phosphate synthetase I, CPSase I, CPS1

**Target/Specificity**

This CPS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 262-291 amino acids from the N-terminal region of human CPS1.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CPS1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CPS1 Antibody (N-term) - Protein Information****Name** CPS1

**Function** Involved in the urea cycle of ureotelic animals where the enzyme plays an important role in removing excess ammonia from the cell.

**Cellular Location**

Mitochondrion. Nucleus, nucleolus. Cell membrane {ECO:0000250|UniProtKB:Q8C196}; Peripheral membrane protein; Extracellular side {ECO:0000250|UniProtKB:Q8C196} Note=Localizes to the cell surface of hepatocytes {ECO:0000250|UniProtKB:Q8C196}

**Tissue Location**

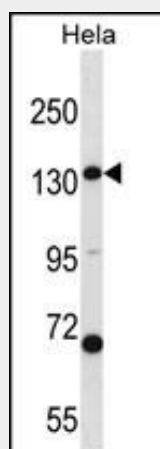
Primarily in the liver and small intestine.

**CPS1 Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**CPS1 Antibody (N-term) - Images**



CPS1 Antibody (N-term) (Cat. #AP16053a) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the CPS1 antibody detected the CPS1 protein (arrow).

**CPS1 Antibody (N-term) - Background**

The mitochondrial enzyme encoded by this gene catalyzes synthesis of carbamoyl phosphate from ammonia and bicarbonate. This reaction is the first committed step of the urea cycle, which is important in the removal of excess urea from cells. The encoded protein may also represent a core mitochondrial nucleoid protein. Three transcript variants encoding different isoforms have been found for this gene. The shortest isoform may not be localized to the mitochondrion. Mutations in this gene have been associated with carbamoyl phosphate synthetase deficiency, susceptibility to

persistent pulmonary hypertension, and susceptibility to venoocclusive disease after bone marrow transplantation.

#### **CPS1 Antibody (N-term) - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)

Jia, P., et al. Schizophr. Res. 122 (1-3), 38-42 (2010) :

Pekkala, S., et al. Hum. Mutat. 31(7):801-808(2010)

Huo, R., et al. J. Biochem. Mol. Biol. 38(1):28-33(2005)

Hoshida, R., et al. Genomics 28(1):124-125(1995)

#### **CPS1 Antibody (N-term) - Citations**

- [Systematic analysis of mRNA expression profiles in NSCLC cell lines to screen metastasis-related genes.](#)