



9765 Clairemont Mesa Blvd, Suite C San Diego, CA 92124 Tel: 858.875.1900 Fax: 858.622.0609

## CPS1 Antibody (N-term)

Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16053a

## **Specification**

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

Application WB,E
Primary Accession P31327

Other Accession NP\_001116105.1,

NP\_001866.2, NP\_001116106.1

Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Rabbit Ig
Clone Names
Antigen Region
Reactivity
Human
Rabbit
Rabbit
Rabbit Ig
RB35290
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

## **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.

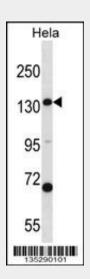
## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. 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



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

## **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

**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
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture