

CPS1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP16053a**Specification**

CPS1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P31327](#)**CPS1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 1373**Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CPS1 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CPS1 Antibody (N-term) Blocking Peptide - Images

CPS1 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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)