

CTPS2 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8779a**Specification**

CTPS2 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9NRF8](#)**CTPS2 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 56474**Other Names**

CTP synthase 2, CTP synthetase 2, UTP--ammonia ligase 2, CTPS2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8779a](/products/AP8779a) was selected from the N-term region of human CTPS2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

CTPS2 Antibody (N-term) Blocking Peptide - Protein Information**Name** CTPS2 {ECO:0000303|PubMed:16179339, ECO:0000312|HGNC:HGNC:2520}**Function**

CTP synthase involved in the de novo synthesis of CTP, a precursor of DNA, RNA and phospholipids. Catalyzes the ATP-dependent amination of UTP to CTP with either L-glutamine or ammonia as a source of nitrogen (PubMed: [10899599](http://www.uniprot.org/citations/10899599), PubMed: [16179339](http://www.uniprot.org/citations/16179339), PubMed: [31873303](http://www.uniprot.org/citations/31873303), PubMed: [34583994](http://www.uniprot.org/citations/34583994)). Constitutes the rate-limiting enzyme in the synthesis of cytosine nucleotides (PubMed: [10899599](http://www.uniprot.org/citations/10899599), PubMed: [16179339](http://www.uniprot.org/citations/16179339)).

Cellular Location

Cytoplasm, cytosol. Nucleus. Note=Cytoplasmic and nuclear; detected in long filamentous structures named cytoophidium

CTPS2 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CTPS2 Antibody (N-term) Blocking Peptide - Images

CTPS2 Antibody (N-term) Blocking Peptide - Background

CTPS2 catalyzes the formation of CTP from UTP with the concomitant eamination of glutamine to glutamate. This protein is the rate-limiting enzyme in the synthesis of cytosine nucleotides, which play an important role in various metabolic processes and provide the precursors necessary for the synthesis of RNA and DNA. Cancer cells that exhibit increased cell proliferation also exhibit an increased activity of this encoded protein. Thus, this protein is an attractive target for selective chemotherapy.

CTPS2 Antibody (N-term) Blocking Peptide - References

Olsen,J.V., et.al., Cell 127 (3), 635-648 (2006)