

# CTPS Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP5337b

#### **Specification**

## CTPS Antibody (C-term) Blocking peptide - Product Information

Primary Accession P17812
Other Accession NP 001896.2

## CTPS Antibody (C-term) Blocking peptide - Additional Information

#### **Gene ID** 1503

#### **Other Names**

CTP synthase 1, CTP synthetase 1, UTP--ammonia ligase 1, CTPS1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=2519" target=" blank">HGNC:2519</a>)

#### **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.

#### CTPS Antibody (C-term) Blocking peptide - Protein Information

## Name CTPS1 (HGNC:2519)

#### **Function**

This enzyme is 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. This enzyme and its product, CTP, play a crucial role in the proliferation of activated lymphocytes and therefore in immunity.

#### **Cellular Location**

Cytoplasm, cytosol. Note=Mainly cytosolic but when active detected in long filamentous structures (PubMed:25223282). Co-localizes with TNK2 in the cytosolic filaments (By similarity). {ECO:0000250|UniProtKB:P70698, ECO:0000269|PubMed:25223282}

#### **Tissue Location**

Widely expressed..



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## CTPS Antibody (C-term) Blocking peptide - Protocols

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

# • Blocking Peptides

CTPS Antibody (C-term) Blocking peptide - Images

#### CTPS Antibody (C-term) Blocking peptide - Background

The catalytic conversion of UTP to CTP is accomplished by the enzyme cytidine-5-prime-triphosphate synthetase. The enzyme is important in the biosynthesis of phospholipids and nucleic acids, and plays a key role in cell growth, development, and tumorigenesis. The region to which the CTPS gene has been mapped is the location of breakpoints involved in several tumor types.

## CTPS Antibody (C-term) Blocking peptide - References

Higgins, M.J., et al. Nucleosides Nucleotides Nucleic Acids 27(6):850-857(2008)Higgins, M.J., et al. J. Biol. Chem. 282(40):29493-29503(2007)Chang, Y.F., et al. J. Biol. Chem. 282(24):17613-17622(2007)