

CTPS2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13030b

Specification

CTPS2 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q9NRF8

Other Accession <u>Q1RMS2</u>, <u>NP 787055.1</u>, <u>NP 062831.3</u>

Reactivity
Predicted
Bovine
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Bovine
Rabbit
Rabbit
Clonality
Polyclonal
Rabbit IgG
Astronomy
450-479

CTPS2 Antibody (C-term) - Additional Information

Gene ID 56474

Other Names

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

Target/Specificity

This CTPS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 450-479 amino acids from the C-terminal region of human CTPS2.

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

CTPS2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CTPS2 Antibody (C-term) - Protein Information

Name CTPS2



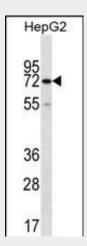
Function Catalyzes the ATP-dependent amination of UTP to CTP with either L-glutamine or ammonia as the source of nitrogen. Constitutes the rate-limiting enzyme in the synthesis of cytosine nucleotides.

CTPS2 Antibody (C-term) - Protocols

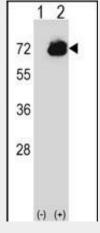
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CTPS2 Antibody (C-term) - Images



CTPS2 Antibody (C-term) (Cat. #AP13030b) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the CTPS2 antibody detected the CTPS2 protein (arrow).



Western blot analysis of CTPS2 (arrow) using rabbit polyclonal CTPS2 Antibody (C-term) (Cat. #AP13030b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CTPS2 gene.



CTPS2 Antibody (C-term) - Background

The protein encoded by this gene catalyzes the formation of CTP from UTP with the concomitant deamination 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. Three alternatively spliced transcript variants encoding the same protein have been described for this gene.

CTPS2 Antibody (C-term) - References

Kassel, K.M., et al. J. Biol. Chem. 285(44):33727-33736(2010) Olsen, J.V., et al. Cell 127(3):635-648(2006) Han, G.S., et al. J. Biol. Chem. 280(46):38328-38336(2005) Ross, M.T., et al. Nature 434(7031):325-337(2005) van Kuilenburg, A.B., et al. Biochim. Biophys. Acta 1492 (2-3), 548-552 (2000) :