

### Product datasheet for TA392816M

#### OriGene Technologies, Inc.

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## CTP synthase (CTPS1) Rabbit Polyclonal Antibody

#### **Product data:**

**Product Type:** Primary Antibodies

Applications: WB

**Recommended Dilution:** WB: 1:500~1:1000 IHC: 1:50~1:200

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 80-130 of Human CTPS.

**Specificity:** CTPS (K109) polyclonal antibody detects endogenous levels of CTPS protein.

Formulation: Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Concentration: 1mg/ml

Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Stability: 1 year

Predicted Protein Size: ~ 67 kDa

Gene Name: CTP synthase 1

**Database Link:** Entrez Gene 1503 Human

P17812

**Background:** CTPS (cytidine-5-prime-triphosphate synthase) is a 591 amino acid protein that contains one

glutamine amidotransferase type-1 domain and is involved in pyrimidine metabolism. CTPS catalyzes the ATP-dependent conversion of UTP to CTP, a rate-limiting reaction that requires either ammonia or L-glutamine as a nitrogen source. Via its catalytic activity, CTPS plays an important role in the synthesis of nucleic acids and is crucial for proper cell growth and development. The function of CTPS is regulated by a variety of mechanisms, including phosphorylation by protein kinase C (PKC), an event that can either stimulate or inhibit CTPS activity. The gene encoding CTPS is located in a region on chromosome 1 that is often

associated with the progression of several tumor types, suggesting a possible role for CTPS in

tumorigenesis.

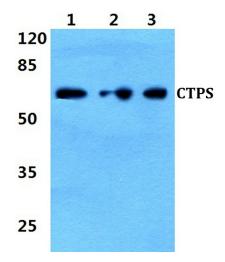




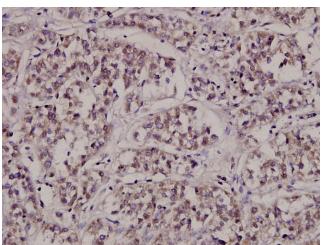
Synonyms: CTPS; CTPS1; CTP synthase 1; CTP synthetase 1; UTP--ammonia ligase 1

**Note:** For research use only, not for use in diagnostic procedure.

# **Product images:**



Western blot (WB) analysis of CTPS (K109) pAb at 1:1000 dilution Lane1:The Kidney tissue lysate of Mouse(40ug) Lane2:The Kidney tissue lysate of Rat(40ug) Lane3:HEK293T whole cell lysate(10ug) Lane4:A549 whole cell lysate(10ug)



Immunohistochemistry (IHC) analyzes of CTPS (K109) pAb in paraffin-embedded liver cancer tissue at 1:100.