

**KD-Validated Anti-CTP synthase 1 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI1435****Specification****KD-Validated Anti-CTP synthase 1 Rabbit Monoclonal Antibody - Product Information**

|                   |   |
|-------------------|---|
| Application       | WB, FC, ICC   |
| Primary Accession | <a href="#">P17812</a>  |
| Reactivity        | Rat, Human, Mouse   |
| Clonality         | Monoclonal  |
| Isotype           | Rabbit IgG  |
| Calculated MW     | Predicted, 67 kDa , observed, 72 kDa KDa  |
| Gene Name         | CTPS1   |
| Aliases           | CTPS1; CTP Synthase 1; GATD5A; CTPS;<br>UTP--Ammonia Ligase 1; CTP Synthetase 1;<br>EC 6.3.4.2; Cytidine 5'-Triphosphate<br>Synthetase; Cytidine 5'-Triphosphate<br>Synthetase; CTP Synthase; GATD5; IMD24<br>A synthesized peptide derived from human<br>CTP synthase / CTPS |
| Immunogen         |   |

**KD-Validated Anti-CTP synthase 1 Rabbit Monoclonal Antibody - Additional Information**

|  |      |
|--|------|
| Gene ID  | 1503 |
| <b>Other Names</b>   |      |
| CTP synthase 1, 6.3.4.2, 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>) |      |

**KD-Validated Anti-CTP synthase 1 Rabbit Monoclonal Antibody - 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**

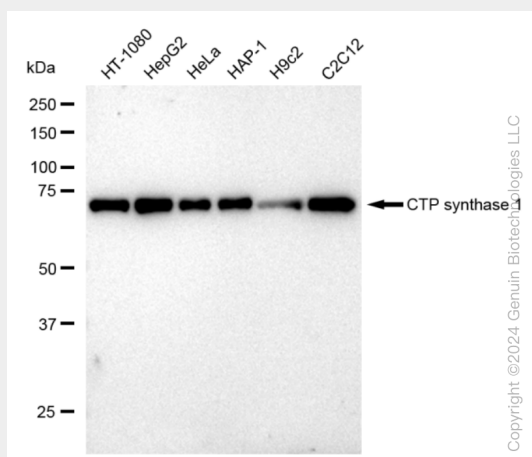
Widely expressed..

## KD-Validated Anti-CTP synthase 1 Rabbit Monoclonal Antibody - Protocols

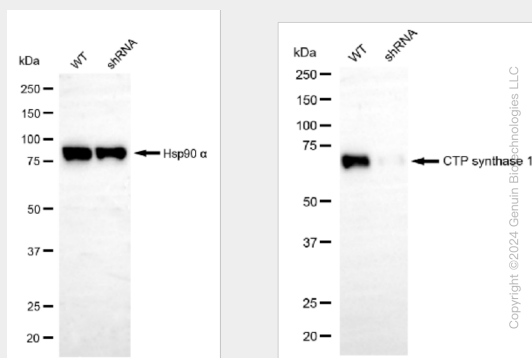
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

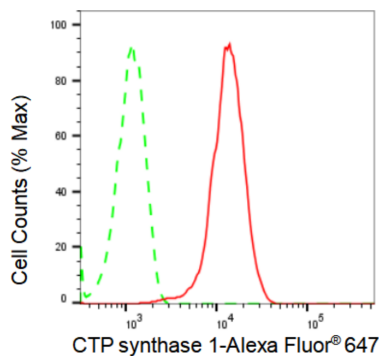
## KD-Validated Anti-CTP synthase 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-CTP synthase 1 antibody (Cat#AGI1435). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CTP synthase 1 antibody (Cat#AGI1435, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

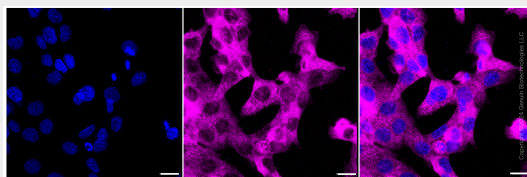


Western blotting analysis using anti-CTP synthase 1 antibody (Cat#AGI1435). CTP synthase 1 expression in wild type (WT) and CTP synthase 1 shRNA knockdown (KD) 293T cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-CTP synthase 1 antibody (Cat#AGI1435, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



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Flow cytometric analysis of CTP synthase 1 expression in HepG2 cells using CTP synthase 1 antibody (Cat#AGI1435, 1:2,000). Green, isotype control; red, CTP synthase 1.



Immunocytochemical staining of HT-1080 cells with CTP synthase 1 antibody (Cat#AGI1435, 1:1,000). Nuclei were stained blue with DAPI; CTP synthase 1 with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.