

## Product datasheet for PH320566

### CTPS2 (NM\_175859) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	CTPS2 MS Standard C13 and N15-labeled recombinant protein (NP_787055)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC220566
Predicted MW:	65.7 kDa
Protein Sequence:	>RC220566 protein sequence Red=Cloning site Green=Tags(s)

MKYILVTGGVISIGKGIASSIGTILKSCGLRVTAIKIDPYINIDAGTFSPYEHGEVFLNDGGEVDLD  
LGNYERFLDINLYKDNITTGKIYQHVINKERRGDYLGKTVQVVPHITDAVQEWVMNQAKVPVDGNKEEP  
QICVIELGGTIGDIEGMPFVEAFRQFQFKAKRENF CNIHVSLVPQLSATGEQKTKPTQNSVRALRGLGLS  
PDLIVCRSSTPIEMAVKEKISMFCNVNPEQVICIHDVSSTYRVPVLLLEEQSIKVFYKERLHLPIGDSASN  
LLFKWRNMADRYERLQKICSIALVGKYTKLRDCYASVFKALEHSALAINHKLNLMYIDSIDLEKITETED  
PVKFHEAWQKLCADGILVPGGFGIRGTLGKLAISWARTKKIPFLGVCLGMQLAVIEFARNCLNLKDDAD  
STEFRPNAPVPLVIDMPEHNPGNLGGTMRGIRRTVFKTENSILRKLKLYGQVDFIEERHRHFEVNPNLIK  
QFEQNDLSFVGQDVGDRMEIIELANHPYFVGQVFHPEFSSRPMKPSPPYLGLLLAATGNLNAYLQQGCK  
LSSDRYSDASDDSFSEPRIAELEIS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_787055</a>
RefSeq Size:	3973
RefSeq ORF:	1758



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**Synonyms:** GATD5B

**Locus ID:** 56474

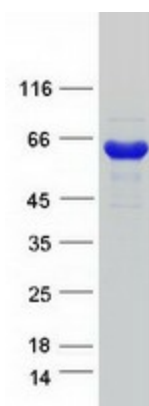
**UniProt ID:** [Q9NRF8](#), [A0A024RC00](#)

**Cytogenetics:** Xp22.2

**Summary:** 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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]

**Protein Pathways:** Metabolic pathways, Pyrimidine metabolism

### Product images:



Coomassie blue staining of purified CTPS2 protein (Cat# [TP320566]). The protein was produced from HEK293T cells transfected with CTPS2 cDNA clone (Cat# [RC220566]) using MegaTran 2.0 (Cat# [TT210002]).