

## Product datasheet for **TR305177**

### CTPS2 Human shRNA Plasmid Kit (Locus ID 56474)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	CTPS2 Human shRNA Plasmid Kit (Locus ID 56474)
Locus ID:	56474
Synonyms:	GATD5B
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CTPS2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 56474). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001144002</a> , <a href="#">NM_019857</a> , <a href="#">NM_175859</a> , <a href="#">NM_019857.1</a> , <a href="#">NM_019857.2</a> , <a href="#">NM_019857.3</a> , <a href="#">NM_019857.4</a> , <a href="#">NM_175859.1</a> , <a href="#">NM_175859.2</a> , <a href="#">NM_001144002.1</a> , <a href="#">BC034986</a> , <a href="#">BC034986.1</a> , <a href="#">BC006256</a> , <a href="#">NM_019857.5</a> , <a href="#">NM_175859.3</a>
UniProt ID:	<a href="#">Q9NRF8</a>
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).