

Product datasheet for RC220566L4

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OriGene Technologies, Inc.

CTPS2 (NM_175859) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CTPS2 (NM_175859) Human Tagged Lenti ORF Clone

Tag: mGFP
Symbol: CTPS2
Synonyms: GATD5B

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC220566).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_175859

ORF Size: 1758 bp





CTPS2 (NM_175859) Human Tagged Lenti ORF Clone - RC220566L4

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 175859.1</u>

 RefSeq Size:
 3973 bp

 RefSeq ORF:
 1761 bp

 Locus ID:
 56474

 UniProt ID:
 Q9NRF8

Protein Pathways: Metabolic pathways, Pyrimidine metabolism

Xp22.2

MW: 65.7 kDa

Cytogenetics:

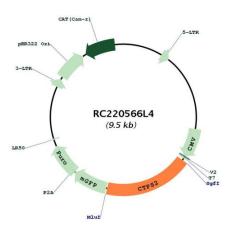
Gene Summary: The protein encoded by this gene catalyzes the formation of CTP from UTP with the

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]



Product images:



Circular map for RC220566L4