

Product datasheet for RC230155L4

OriGene Technologies, Inc.

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SHMT2 (NM_001166358) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: SHMT2 (NM_001166358) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: SHMT2

Synonyms: GLYA; HEL-S-51e; NEDCASB; SHMT

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(RC230155).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_001166358

ORF Size: 1515 bp



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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 001166358.1</u>, <u>NP 001159830.1</u>

RefSeq Size:2256 bpRefSeq ORF:1452 bpLocus ID:6472

UniProt ID: P34897
Cytogenetics: 12q13.3

Protein Pathways: Cyanoamino acid metabolism, Glycine, serine and threonine metabolism, Metabolic

pathways, Methane metabolism, One carbon pool by folate

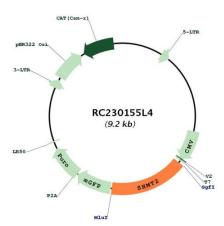
MW: 56 kDa

Gene Summary: This gene encodes the mitochondrial form of a pyridoxal phosphate-dependent enzyme that

catalyzes the reversible reaction of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. The encoded product is primarily responsible for glycine synthesis. The activity of the encoded protein has been suggested to be the primary source of intracellular glycine. The gene which encodes the cytosolic form of this enzyme is located on chromosome 17. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009]



Product images:



Circular map for RC230155L4