

Product datasheet for RC203461L1V

OriGene Technologies, Inc.

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SHMT1 (NM_004169) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: SHMT1 (NM_004169) Human Tagged ORF Clone Lentiviral Particle

Symbol: SHMT1

Synonyms: CSHMT; SHMT

Mammalian Cell

Selection:

None

Vector: pLenti-C-Myc-DDK (PS100064)

Tag: Myc-DDK
ACCN: NM 004169

ORF Size: 1449 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC203461).

OTI Disclaimer:

Sequence:

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.

RefSeq: <u>NM 004169.3</u>

 RefSeq Size:
 2553 bp

 RefSeq ORF:
 1452 bp

 Locus ID:
 6470

 UniProt ID:
 P34896

 Cytogenetics:
 17p11.2

Domains: SHMT





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

pathways, Methane metabolism, One carbon pool by folate

MW: 53.1 kDa

Gene Summary: This gene encodes the cytosolic form of serine hydroxymethyltransferase, a pyridoxal

phosphate-containing enzyme that catalyzes the reversible conversion of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. This reaction provides one-carbon units for synthesis of methionine, thymidylate, and purines in the cytoplasm. This

gene is located within the Smith-Magenis syndrome region on chromosome 17. A

pseudogene of this gene is located on the short arm of chromosome 1. Alternative splicing

results in multiple transcript variants. [provided by RefSeq, Aug 2013]