

Product datasheet for RC204239L4V

OriGene Technologies, Inc.

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SHMT2 (NM_005412) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: SHMT2 (NM_005412) Human Tagged ORF Clone Lentiviral Particle

Symbol: SHMT2

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

Mammalian Cell

Selection:

Puromycin

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

Tag: mGFP

ACCN: NM_005412 **ORF Size:** 1512 bp

ORF Nucleotide

OTI Disclaimer:

Sequence:

The ORF insert of this clone is exactly the same as(RC204239).

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 005412.4</u>

 RefSeq Size:
 2295 bp

 RefSeq ORF:
 1515 bp

 Locus ID:
 6472

 UniProt ID:
 P34897

 Cytogenetics:
 12q13.3

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: 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]