

Product datasheet for **RC205102L2V**

SHMT1 (NM_148918) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	SHMT1 (NM_148918) Human Tagged ORF Clone Lentiviral Particle
Symbol:	SHMT1
Synonyms:	CSHMT; SHMT
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_148918
ORF Size:	1332 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC205102).
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.
RefSeq:	NM_148918.1 , NP_683718.1
RefSeq Size:	2436 bp
RefSeq ORF:	1335 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:	49 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]