

Product datasheet for TP303461

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

SHMT1 (NM_004169) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human serine hydroxymethyltransferase 1 (soluble) (SHMT1),

transcript variant 1, 20 µg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone or AA Sequence:

>RC203461 protein sequence Red=Cloning site Green=Tags(s)

MTMPVNGAHKDADLWSSHDKMLAQPLKDSDVEVYNIIKKESNRQRVGLELIASENFASRAVLEALGSCL

Ν

NKYSEGYPGQRYYGGTEFIDELETLCQKRALQAYKLDPQCWGVNVQPYSGSPANFAVYTALVEPHGRIMG LDLPDGGHLTHGFMTDKKKISATSIFFESMPYKVNPDTGYINYDQLEENARLFHPKLIIAGTSCYSRNLE YARLRKIADENGAYLMADMAHISGLVAAGVVPSPFEHCHVVTTTTHKTLRGCRAGMIFYRKGVKSVDPKT GKEILYNLESLINSAVFPGLQGGPHNHAIAGVAVALKQAMTLEFKVYQHQVVANCRALSEALTELGYKIV TGGSDNHLILVDLRSKGTDGGRAEKVLEACSIACNKNTCPGDRSALRPSGLRLGTPALTSRGLLEKDFQK VAHFIHRGIELTLQIQSDTGVRATLKEFKERLAGDKYQAAVQALREEVESFASFFPLPGLPDF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 52.9 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.





SHMT1 (NM_004169) Human Recombinant Protein - TP303461

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 004160

 Locus ID:
 6470

 UniProt ID:
 P34896

 RefSeq Size:
 2553

Cytogenetics: 17p11.2 RefSeq ORF: 1449

Synonyms: CSHMT; SHMT

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

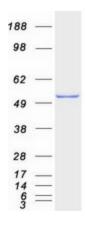
pseudogene of this gene is located on the short arm of chromosome 1. Alternative splicing

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

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

pathways, Methane metabolism, One carbon pool by folate

Product images:



Coomassie blue staining of purified SHMT1 protein (Cat# TP303461). The protein was produced from HEK293T cells transfected with SHMT1 cDNA clone (Cat# [RC203461]) using MegaTran 2.0 (Cat# [TT210002]).