

Product datasheet for TP303461L

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, 1 mg

Species: Human

Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >RC203461 protein sequence
Red=Cloning site **Green**=Tags(s)

MTMPVNGAHKDADLWSSHDKMLAQPLKSDSDEVYNIKKESNRQRVGLELIASENFASRAVLEALGSCLN
NKYSEGYPGQRYGGTEFIDELETLCQKRALQAYKLDPQCWGVNVQPYSGSPANFAVYTALVEPHGRIMG
LDLPDGGHLTHGFMTDKKISATSIFFESMPYKVNPDGYINYDQLEENARLFHPKLIAGTSCYSRNLE
YARLRKIADENGAYLMADMAHISGLVAAGVVPSPFEHCHVVTTHKTLRGCRAGMIFYRKGVKSVDPKT
GKEILYNLESLINSAVFPGLQGPHNHAIAGVAVALKQAMTLEFKVYQHQQVANCRLSEALTELGYKIV
TGGSDNHLILVDLRSGTDGGRAEKVLEACSIACNKNTCPGDRSALRPSGLRLGTPALTSRGLLEKDFQK
VAHFIHRGIELTLQIQSDTGVRATLKEFKERLAGDKYQAAVQALREEVESFASFFPLPLPDF

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.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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RefSeq: [NP_004160](#)

Locus ID: 6470

UniProt ID: [P34896](#)

RefSeq Size: 2553

Cytogenetics: 17p11.2

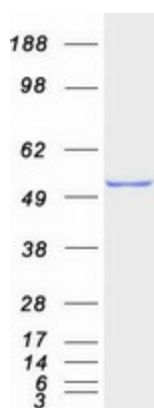
RefSeq ORF: 1449

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]).