

Recombinant Human SHMT2, His-tagged

Cat. No. SHMT2-31356TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment, corresponding to amino acids 376-504 of Human SHMT2 with an N terminal His tag; Predicted MWt 15 kDa.
Species	Human
Source	E.coli
ProteinLength	376-504 a.a.
Description	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.
Conjugation	HIS
Form	Lyophilised:Reconstitute with 125 µl aqua dest.
Storage buffer	Preservative: NoneConstituents: 0.5% Trehalose, 6M Urea, 100mM Sodium phosphate, 10mM Sodium chloride, pH 4.5
Storage	Shipped at 4°C. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.

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Sequences of amino acids

GTDNHLVLVDLRPKGLDGARAERVLELV SITANKNTCPGD RSAITPGGLRLGAPALT
SRQFREDDFRRVVD FIDEGVN IGLEVKSKTAKLQDFKSFLK DSETSQRLANLRQRV
EQ FARAFPM PGFDEH

GENE INFORMATION

Gene Name SHMT2 serine hydroxymethyltransferase 2 (mitochondrial) [Homo sapiens]

Official Symbol SHMT2

Synonyms SHMT2; serine hydroxymethyltransferase 2 (mitochondrial); SHMT; serine hydroxymethyltransferase, mitochondrial;

Gene ID 6472

mRNA Refseq NM_001166356

Protein Refseq NP_001159828

MIM 138450

Uniprot ID P34897

Chromosome Location 12q12-q14

Pathway C1-unit interconversion, eukaryotes, organism-specific biosystem; C1-unit interconversion, eukaryotes, conserved biosystem; Cyanoamino acid metabolism, organism-specific biosystem; Cyanoamino acid metabolism, conserved biosystem; Glycine, serine and threonine metabolism, organism-specific biosystem;

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Function

L-allo-threonine aldolase activity; amino acid binding; chromatin binding; glycine hydroxymethyltransferase activity; glycine hydroxymethyltransferase activity;

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