

SHMT1 recombinant protein

SHMT1, 1-483aa, Human, His tag, E Coli

CATALOG # AAA48706	HOST E Coli	APPLICATIONS SDS-Page
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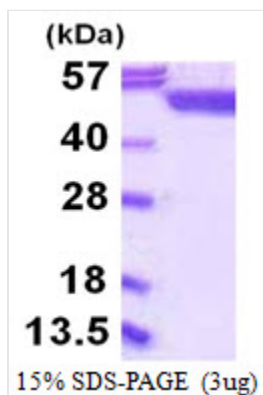
PRODUCT SYNONYMS

SHMT1; 1-483aa; Human; His tag; E Coli; Serine hydroxymethyltransferase 1; CSHMT; SHMT; SHMT1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 95% by SDS-PAGE
Form/Format	Liquid. In 20mM Tris-HCl Buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl
Concentration	1 mg/ml (determined by Bradford assay) (varies by lot)
Sequence	MGSSHHHHHH SSGLVPRGSH MTMPVNGAHK DADLWSSHDK MLAQPLKDS D VEVYNIKK E SNRQRVGLEL IASENFASRA VLEALGSCLN NKYSEGYPGQ RYYGGTEFID ELETLCQKRA LQAYKLD PQC WGVNVQPYSG SPANFAVYTA LVEPHGRIMG LDLPDGGHLT HGFMTDKKKI SATSIFFESM PYKVNPD TGY INYDQLEENA RLFHPKLIIA GTSCYSRNLE YARLRKIADE NGAYLMADMA HISGLVAAGV VPSPFEHCHV VTTTTHKTLR GCRAGMIFYR KGVKSVDPKT GKEILYNLES LINSVFPGL QGGPHNHAIA GVAVALKQAM TLEFKVYQH Q VVANCRLSE ALTELG YKIV TGGSDNHLIL VDLRSKGT DG GRAEKVLEAC SIACNKNTCP GDRSALRPSG LRLGTPALTS RGLLEKDFQK VAHFIHRGIE LTLQIQSDTG VRATLKEFKE RLAGDKYQAA VQALREEVES FASFFPLPGL PDF
Sequence Length	483
Applicable Applications for SHMT1 recombinant protein	SDS-PAGE
Antigen Species	Human
Tag Information	His-tag
Preparation and Storage	Can be stored at 4 degree C short term (1-2 weeks). For long term storage, aliquot and store at -20 degree C or -70 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for SHMT1 recombinant protein	Serine hydroxymethyltransferase 1, also known as SHMT1, belongs to the SHMT family. This protein is cellular 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. Also, SHMT1 preferentially supplies one-carbon units for thymidylate biosynthesis, depletes methylenetetrahydrofolate pools for S-adenosylmethionine (SAM) synthesis by synthesizing serine, sequesters 5-methyltetrahydrofolate and inhibits. Recombinant human SHMT1 protein, fused to His-tag at N-terminus, was expressed in E Coli and purified by using conventional chromatography techniques.
Product Categories/Family for SHMT1 recombinant protein	Metabolism
References	Herbig K., et al. (2002) J Biol Chem. 277:38381-38389.; Trivedi V., et al. (2002) J Biol Chem. 277:17161-17169.

NCBI AND UNIPROT INFORMATION

NCBI GI #	14124914
NCBI GeneID	6470
Molecular Weight	55.2 kDa (503aa)
NCBI Official Full Name	Serine hydroxymethyltransferase 1 (soluble)
NCBI Official Synonym Full Names	serine hydroxymethyltransferase 1
NCBI Official Symbol	SHMT1
NCBI Official Synonym Symbols	SHMT; CSHMT
NCBI Protein Information	serine hydroxymethyltransferase, cytosolic
UniProt Protein Name	Serine hydroxymethyltransferase, cytosolic
UniProt Gene Name	SHMT1
UniProt Synonym Gene Names	SHMT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.