



Recombinant Human Serine hydroxymethyltransferase, cytosolic (SHMT1)

Product Code	CSB-MP021272HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P34896
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	TMPVNGAHK DADLWSSHDK MLAQPLKDS D VEVYNIKKE SNRQRVGLLE IASENFASRA VLEALGSC LN NKYSEGYPGQ RYYGGTEFID ELETLCQKRA LQAYKLDPQC WGVNVQPYS G SPANFAVYTA LVEPHGRIMG LDLPDGGHLT HGFMTDKKKI SATSIF FESM PYKVNPD TGY INYDQLEENA RLFHPKLIIA GTSCYSRNLE YARLRK IADE NGAYLMADMA HISGLVAAGV VPSPFEHCHV VTTTTHKTLR GC RAGMIFYR KGVKSVD PKT GKEILYNLES LINS AVFPGL QGGPHNHAIA GVAVALKQAM TLEFKVYQH Q VVANCRA LSE ALTELG YKIV TGGSDNHLIL VDLRSKGTDG GRAEKVLEAC SIACNKNTCP GDRSALRPSG LRLGTPALTS RGLLEKDFQK VAHFIHRGIE LTLQIQSDTG VRATLKEFKE RLAGDKYQAA VQALREEVES FASLFPLPGL PDF
Source	Mammalian cell
Target Names	SHMT1
Protein Names	Recommended name: Serine hydroxymethyltransferase, cytosolic Short name= SHMT EC= 2.1.2.1 Alternative name(s): Glycine hydroxymethyltransferase Serine methylase
Expression Region	2-483
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This gene encodes the 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. 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. Alternative splicing of this gene results in 2 transcript variants encoding 2 different isoforms. Additional transcript variants have been described, but their biological validity has not been determined.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.