



# Recombinant Sheep Serine hydroxymethyltransferase, cytosolic (SHMT1)

<b>Product Code</b>	CSB-EP021272SH
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P35623
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Ovis aries (Sheep)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	AAPVNKAPR DADLWSLHEK MLAQPLKDND VEVYNIKKE SNRQRVLEL IASENFASRA VLEALGSCLN NKYSEGYPGQ RYYGGTEFID ELEVLCQKRA LQVYGLDPEC WGVNVQPYSG SPANFAVYTA LVEPHGRIMG LDLPDGGHLT HGFMTDKKKI SATSIFFESM PYKVNPDYGY INYDQLEENA RLFHPRLIIA GTSCYSRNLD YARLRKIADD NGAYLMADMA HISGLVAAGV VPSPFEHCHV VSTTTHKTLR GCRAGMIFYR KGVRSVDPKT GKETRYNLES LINSAVFPGL QGGPHNHAIA GVAVALKQAM TPEFRAYQRQ VVANCRALAE ALMGLGYRVV TGGSDNHLIL VDLRSKGTG GRAEKVLEAC SIACNKNTCP GDKSALRPSG LRLGTPALTS RGLLEEDFRK VAHFIHRGIE LTLQIQDAVG VKATLKEFME KLAGAEEHQR AVTALRAEVE SFATLFPLPG LPGF
<b>Source</b>	E.coli
<b>Target Names</b>	SHMT1
<b>Protein Names</b>	Recommended name: Serine hydroxymethyltransferase, cytosolic Short name= SHMT EC= 2.1.2.1 Alternative name(s): Glycine hydroxymethyltransferase Serine methylase
<b>Expression Region</b>	2-484
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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.
<b>Reconstitution</b>	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.

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### 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.