

## Product datasheet for **AR50135PU-S**

### SHMT1 / SHMT (1-483, His-tag) Human Protein

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	SHMT1 / SHMT (1-483, His-tag) human recombinant protein, 0.1 mg
<b>Species:</b>	Human
<b>Expression Host:</b>	E. coli
<b>Expression cDNA Clone or AA Sequence:</b>	MGSSHHHHHH SSGLVPRGSH MTMPVNGAHK DADLWSSHDK MLAQPLKDSD VEVYNIKKE SNRQRVGLLEL IASENFASRA VLEALGSCLN NKYSEGYPGQ RYYGGTEFID ELETLCQKRA LQAYKLDPQC WGVNVQPYSG SPANFAVYTA LVEPHGRIMG LDLPDGGHLT HGFMTDKKKI SATSIFFESM PYKVPDGTGY INYDQLEENA RLFHPKLIIA GTSCYSRNLE YARLRKIADE NGAYLMADMA HISGLVAAGV VPSPFEHCHV VTTTTHKTLR GCRAGMIFYR KGVKSVDPKT GKEILYNLES LINSAVFPGL QGGPHNHAIA GVAVALKQAM TLEFKVYQHQ VVANCRALE ALTELGKIV TGGSDNHLIL VDLRSKGTDG GRAEKVLEAC SIACNKNTCP GDRSALRPSG LRLGTPALTS RGLLEKDFQK VAHFIHRGIE LTLQIQSDTG VRATLKEFKE RLAGDKYQAA VQALREEVES FASFFPLPGL PDF
<b>Tag:</b>	His-tag
<b>Predicted MW:</b>	55.2 kDa
<b>Concentration:</b>	lot specific
<b>Purity:</b>	>95% by SDS - PAGE
<b>Buffer:</b>	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol, 0.1M NaCl
<b>Preparation:</b>	Liquid purified protein
<b>Protein Description:</b>	Recombinant human SHMT1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
<b>Storage:</b>	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>RefSeq:</b>	<u><a href="#">NP_001268715</a></u>
<b>Locus ID:</b>	6470



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UniProt ID: [P34896](#)

Cytogenetics: 17p11.2

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:

