

Product datasheet for **TP725918**

Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Human SHMT1 (C-6His)
Species:	Human
Expression cDNA Clone or AA Sequence:	Met3-Phe483
Tag:	C-His
Buffer:	Filtered solution of 20 mM PB, 150 mM NaCl, pH6.0
Note:	Recombinant Human Serine Hydroxymethyltransferase Cytosolic is produced by our Mammalian expression system and the target gene encoding Met3-Phe483 is expressed with a 6His tag at the C-terminus.
Stability:	12 months from date of despatch
Synonyms:	Serine Hydroxymethyltransferase Cytosolic; SHMT; Glycine Hydroxymethyltransferase; Serine Methylase; SHMT1
Summary:	Serine Hydroxymethyltransferase Cytosolic (SHMT1) is a member of the SHMT family. SHMT1 is a cytoplasmic protein and exists as a homotetramer. SHMT1 catalyzes the reversible conversion of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. This reaction provides one carbon unit for the synthesis of methionine, thymidylate, and purines in the cytoplasm. A reduction in SHMT1 levels would result in less glycine that could affect the nervous system by acting as an agonist to the NMDA receptor and this could be a mechanism behind Smith-Magenis syndrome.



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