

## Product datasheet for **TP726943**

### Human Recombinant Protein

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant Human Serine Hydroxymethyltransferase Cytosolic/SHMT1 (C-6His)
<b>Species:</b>	Human
<b>Expression cDNA Clone or AA Sequence:</b>	Met3-Phe483
<b>Tag:</b>	C-His
<b>Buffer:</b>	Lyophilized from a 0.2 um filtered solution of 20mM Tris-HCl,150mM NaCl,1mM EDTA,5% Trehalose,pH 8.0.
<b>Note:</b>	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.
<b>Storage:</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Stability:</b>	12 months from date of despatch
<b>Synonyms:</b>	Serine Hydroxymethyltransferase Cytosolic; SHMT; Glycine Hydroxymethyltransferase; Serine Methylase; SHMT1
<b>Summary:</b>	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.



[View online »](#)