

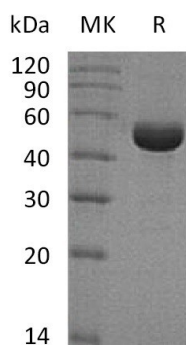
**Product Name: Recombinant Human SHMT1 (C-6His)**  
**Catalog #: PHH1492**



## Summary

<b>Name</b>	Serine hydroxymethyltransferase/SHMT1
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE
<b>Endotoxin level</b>	<1 EU/μg as determined by LAL test.
<b>Construction</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>Accession #</b>	AAH07979.1
<b>Host</b>	Human Cells
<b>Species</b>	Human
<b>Predicted Molecular Mass</b>	53.9 KDa
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, 1mM EDTA, 5% Trehalose, 5% Mannitol, 0.02% Tween80, pH 6.0.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Stability&amp;Storage</b>	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SDS-PAGE image



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## Background

### Alternative Names

Serine Hydroxymethyltransferase Cytosolic; SHMT; Glycine Hydroxymethyltransferase; Serine Methylase; SHMT1

### Background

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.

## Note

For Research Use Only , Not for Diagnostic Use.