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

Summary

Name	Serine hydroxymethyltransferase/SHMT1
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/μg as determined by LAL test.
Construction	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.
Accession #	AAH07979.1
Host	Human Cells
Species	Human
Predicted Molecular Mass	53.9 KDa
Formulation	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.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	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.
Reconstitution	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.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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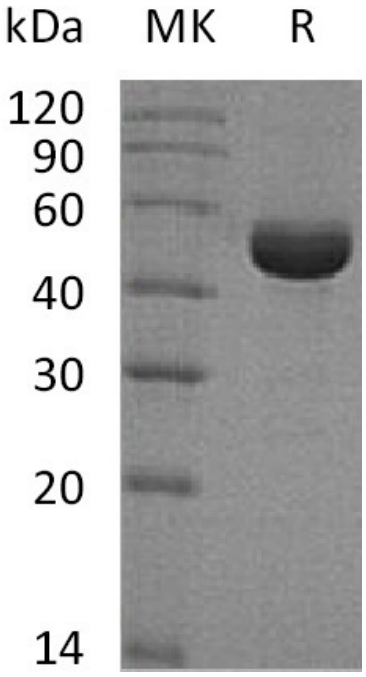

Alternative Names

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.