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## Datasheet for ABIN7319012 SHMT1 Protein (His tag)

### Overview

Quantity:	50 µg
Target:	SHMT1
Origin:	Human
Source:	Human Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SHMT1 protein is labelled with His tag.

### Product Details

Purpose:	Recombinant Human SHMT1 Protein (His Tag)
Sequence:	Met3-Phe483
Characteristics:	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.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

### Target Details

Target:	SHMT1
Alternative Name:	SHMT1 ( <a href="#">SHMT1 Products</a> )
Background:	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

## Target Details

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.

Synonym: Serine Hydroxymethyltransferase Cytosolic, SHMT, Glycine Hydroxymethyltransferase, Serine Methylase, SHMT1

Molecular Weight: 53.9 kDa

UniProt: [P34896](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.