

Recombinant Human SHMT1 Protein (His Tag)

Catalog Number:PKSH033029



Note: Centrifuge before opening to ensure complete recovery of vial contents.

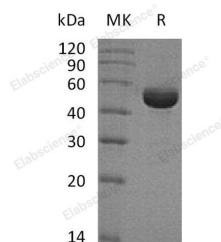
Description

Synonyms	Serine Hydroxymethyltransferase Cytosolic;SHMT;Glycine Hydroxymethyltransferase;Serine Methylase;SHMT1
Species	Human
Expression Host	HEK293 Cells
Sequence	Met3-Phe483
Accession	AAH07979.1
Calculated Molecular Weight	53.9 kDa
Observed molecular weight	55 kDa
Tag	C-His

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
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. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer t
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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.

For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: www.elabscience.com

Tel: 1-832-243-6086

Email: techsupport@elabscience.com

Fax: 1-832-243-6017