Recombinant Human Serine Hydroxymethyltransferase Cytosolic/SHMT1 Protein(C-6His)

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3th Edition

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

Description: 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.

Form:PBS

Molecular Weight:53.9 kDa

Sequences: Met3-Phe483

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.