Creative Enzymes®

L-Serine Hydroxymethyltransferase (Crude Enzyme)

Cat. No. NATE-1809

Lot. No. (See product label)

Introduction

Description	Serine hydroxymethyltransferase (SHMT) is a PLP dependent enzyme (EC 2. 1. 2. 1) which plays an important role in cellular one-carbon pathways by catalyzing the reversible, simultaneous conversions of L-serine to glycine and tetrahydrofolate (THF) to 5,10-methylenetetrahydrofolate. This reaction provides the largest part of the one-carbon units available to the cell. This product with the indicated enzyme activity was briefly purified from engineered E. coli.
Applications	pharmacology; medicine; synthesis; analysis
Synonyms	serine aldolase; threonine aldolase; serine hydroxymethylase; serine hydroxymethyltransferase; allothreonine aldolase; L-serine hydroxymethyltransferase; L-threonine aldolase; serine hydroxymethyltransferase; serine transhydroxymethylase

Product Information

Source	E. coli
Appearance	Clear to translucent yellow solution
EC Number	EC 2.1.2.1
CAS No.	9029-83-8
Activity	Undetermined
Reaction	5,10-methylenetetrahydrofolate + glycine + H 2 O = tetrahydrofolate + L-serine
Notes	Since this product needs to be freshly prepared, it will take about 2 weeks after you confirm the order. Each time of the freeze-thawing may cause partial inactivation. Therefore, it should be dispensed as required and stored at -20 ° C or lower. With the preservation of the extension of time, the enzyme activity will decline to a certain extent, so the product should be used as soon as possible. This product may have turbidity or precipitation in the production and preservation process, it can be mixed after melting and will not affect the normal use. This product is limited to scientific research use, shall not be used for clinical diagnosis or treatment, shall not be used for food or medicine, shall not be stored in ordinary residential. For your safety and health, please wear an experimental suit and wear disposable gloves.

Usage and Packaging

Package	100ml

Storage and Shipping Information

Storage	at -20 °C or lower, for at least 1 month.