

dihydrofolate synthase

Cat. No. EXWM-5733

Lot. No. (See product label)

Introduction

Description

In some bacteria, a single protein catalyses both this activity and that of EC 6.3.2.17, tetrahydrofolate synthase, the combined activity of which leads to the formation of the coenzyme polyglutamated tetrahydropterolate (H4PteGlu), i.e. various tetrahydrofolates. In contrast, the activities are located on separate proteins in most eukaryotes studied to date. This enzyme is responsible for attaching the first glutamate residue to dihydropterolate to form dihydrofolate and is present only in those organisms that have the ability to synthesize tetrahydrofolate de novo, e.g. plants, most bacteria, fungi and protozoa.

Synonyms

dihydrofolate synthetase; 7,8-dihydrofolate synthetase; H2-folate synthetase; 7,8-dihydropterolate:L-glutamate ligase (ADP); dihydropterolate:L-glutamate ligase (ADP-forming); DHFS

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 6.3.2.12

CAS No.

37318-62-0

Reaction

ATP + 7,8-dihydropterolate + L-glutamate = ADP + phosphate + 7,8-dihydropteroylglutamate

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.