Creative Enzymes®

thymidylate synthase (FAD)

Cat. No. EXWM-1744

Lot. No. (See product label)

Introduction

Description	Contains FAD. All thymidylate synthases catalyse a reductive methylation involving the transfer of the methylene group of 5,10-methylenetetrahydrofolate to the C5 position of dUMP and a two electron reduction of the methylene group to a methyl group. Unlike the classical thymidylate synthase, ThyA (EC 2.1.1.45), which uses folate as both a 1-carbon donor and a source of reducing equivalents, this enzyme uses a flavin coenzyme as a source of reducing equivalents, which are derived from NADPH.
Synonyms	Thy1; ThyX

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.1.1.148
CAS No.	850167-13-4
Reaction	5,10-methylenetetrahydrofolate + dUMP + NADPH + H+ = dTMP + tetrahydrofolate + NADP+
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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.