Creative Enzymes®

methylenetetrahydrofolate-tRNA-(uracil54-C5)-methyltransferase (FADH2-oxidizing)

Cat. No. EXWM-1975

Lot. No. (See product label)

Introduction

Description	Up to 25% of the bases in mature tRNA are post-translationally modified or hypermodified. One almost universal post-translational modification is the conversion of U54 into ribothymidine in the TψC loop, and this modification is found in most species studied to date. Unlike this enzyme, which uses 5,10-methylenetetrahydrofolate and FADH2 to supply the atoms for methylation of U54, EC 2.1.1.35, tRNA (uracil54-C5)-methyltransferase, uses S-adenosyl-L-methionine.
Synonyms	folate-dependent ribothymidyl synthase; methylenetetrahydrofolate-transfer ribonucleate uracil 5-methyltransferase; 5,10-methylenetetrahydrofolate:tRNA-UψC (uracil-5-)-methyl-transferase; 5,10-methylenetetrahydrofolate:tRNA (uracil-5-)-methyl-transferase; TrmFO; folate/FAD-dependent tRNA T54 methyltransferase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.1.1.74
CAS No.	56831-74-4
Reaction	5,10-methylenetetrahydrofolate + uracil54 in tRNA + FADH2 = tetrahydrofolate + 5-methyluracil54 in tRNA + FAD
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 ℃.