Creative Enzymes®

tRNA (cytidine34-2'-O)-methyltransferase

Cat. No. EXWM-1808

Lot. No. (See product label)

Introduction

Description The enzyme from Escherichia coli catalyses the 2'-O-methylation of cytidine or 5-carboxymethylaminomethyluridine at the wobble position at nucleotide 34 in tRNALeuCmAA and tRNALeucmnm5UmAA. The enzyme is selective for the two tRNALeu isoacceptors and only methylates these when they present the correct anticodon loop sequence and modification pattern. Specifically, YibK requires a pyrimidine nucleoside at position 34, it has a clear preference for an adenosine at position 35, and it fails to methylate without prior addition of the N6-(isopentenyl)-2-methylthioadenosine modification at position 37.

Synonyms yibK (gene name); methyltransferase yibK; TrmL; tRNA methyltransferase L; tRNA (cytidine34/5-carboxymethylaminomethyluridine34-2'-O)-methyltransferase

Product Information

Form Liquid or lyophilized powder

EC Number EC 2.1.1.207

Reaction (1) S-adenosyl-L-methionine + cytidine34 in tRNA = S-adenosyl-L-homocysteine + 2'-O-methylcytidine34 in tRNA; (2) S-adenosyl-L-methionine + 5-carboxymethylaminomethyluridine34 in tRNALeu = S-adenosyl-L-homocysteine + 5-carboxymethylaminomethyl-2'-O-methyluridine34 in tRNALeu

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 ℃.