

## 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 tRNA<sup>Leu</sup>CmAA and tRNA<sup>Leu</sup>cmnm5UAA. The enzyme is selective for the two tRNA<sup>Leu</sup> 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 tRNA<sup>Leu</sup> = S-adenosyl-L-homocysteine + 5-carboxymethylaminomethyl-2'-O-methyluridine34 in tRNA<sup>Leu</sup>

**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.