Creative Enzymes®

O-phospho-L-seryl-tRNA:Cys-tRNA synthase

Cat. No. EXWM-2811

Lot. No. (See product label)

Introduction

Description	In organisms like Archaeoglobus fulgidus lacking EC 6.1.1.16 (cysteine-tRNA ligase) for the direct Cys-tRNACys formation, Cys-tRNACys is produced by an indirect pathway, in which EC 6.1.1.27 (O-phosphoseryl-tRNA ligase) ligates O-phosphoserine to tRNACys, and EC 2.5.1.73 converts the produced O-phospho-L-seryl-tRNACys to Cys-tRNACys. The SepRS/SepCysS pathway is the sole route for cysteine biosynthesis in the organism. Methanosarcina mazei can use both pathways, the direct route using EC 6.1.1.16 (cysteine-tRNA ligase) and the indirect pathway with EC 6.1.1.27 (O-phosphoseryl-tRNA ligase) and EC 2.5.1.73.
Synonyms	SepCysS; Sep-tRNA:Cys-tRNA synthase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.5.1.73
CAS No.	1239229-21-0
Reaction	O-phospho-L-seryl-tRNACys + sulfide = L-cysteinyl-tRNACys + phosphate
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 ℃.