Creative Enzymes®

# 2-iminoacetate synthase

*Cat. No. EXWM-4932*

*Lot. No.* (See product label)

## Introduction

***Description*** Binds a [4Fe-4S] cluster that is coordinated by 3 cysteines and an exchangeable S-adenosyl-L-methionine molecule. The first stage of catalysis is reduction of the S-adenosyl-L-methionine to produce methionine and a 5-deoxyadenosin-5-yl radical that is crucial for the conversion of the substrate. The reductant is assumed to be NADPH, which is provided by a flavoprotein:NADPH oxidoreductase system. Part of the pathway for thiamine biosynthesis.

***Synonyms*** thiH (gene name)

## Product Information

***Form*** Liquid or lyophilized powder

***EC Number*** EC 4.1.99.19

***Reaction*** L-tyrosine + S-adenosyl-L-methionine + NADPH = 2-iminoacetate + 4-methylphenol + 5'-deoxyadenosine + L-methionine + NADP+ + H+

***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 ℃.