

## glycine/sarcosine/dimethylglycine N-methyltransferase

Cat. No. EXWM-1759

Lot. No. (See product label)

### Introduction

#### Description

Unlike EC 2.1.1.156 (glycine/sarcosine N-methyltransferase), EC 2.1.1.157 (sarcosine/dimethylglycine N-methyltransferase) and EC 2.1.1.161 (dimethylglycine N-methyltransferase), this enzyme, from the halophilic methanoarchaeon *Methanohalophilus portucalensis*, can methylate glycine and all of its intermediates to form the compatible solute betaine.

#### Synonyms

GSDMT; glycine sarcosine dimethylglycine N-methyltransferase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 2.1.1.162

#### Reaction

3 S-adenosyl-L-methionine + glycine = 3 S-adenosyl-L-homocysteine + betaine (overall reaction); (1a) S-adenosyl-L-methionine + glycine = S-adenosyl-L-homocysteine + sarcosine; (1b) S-adenosyl-L-methionine + sarcosine = S-adenosyl-L-homocysteine + N,N-dimethylglycine; (1c) S-adenosyl-L-methionine + N,N-dimethylglycine = S-adenosyl-L-homocysteine + betaine

#### 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.