Creative Enzymes®

# glycine/sarcosine/dimethylglycine N-methyltransferase

*Cat. No. EXWM-1759*

*Lot. No.* (See product label)

## Introduction

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| ***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

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| ***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

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| ***Storage*** | Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃. |