Creative Enzymes®

# arsenite methyltransferase

*Cat. No. EXWM-1733*

*Lot. No.* (See product label)

## Introduction

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| **Description** | An enzyme of the biotransformation pathway that forms dimethylarsinate from inorganic arsenite and arsenate. It methylates arsenite to form methylarsonate, Me-AsO3H2, which is reduced by EC 1.20.4.2, methylarsonate reductase, to methylarsonite, Me-As(OH)2. Methylarsonite is also a substrate for this enzyme (EC 2.1.1.137), which converts it into the much less toxic compound dimethylarsinate (cacodylate), Me2As(O)-OH. |
| **Synonyms** | S-adenosyl-L-methionine:arsenic(III) methyltransferase; S-adenosyl-L-methionine:methylarsonite As-methyltransferase; methylarsonite methyltransferase |

## Product Information

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| **Form** | Liquid or lyophilized powder |
| **EC Number** | EC 2.1.1.137 |
| **CAS No.** | 167140-41-2 |
| **Reaction** | (1) S-adenosyl-L-methionine + arsenite = S-adenosyl-L-homocysteine + methylarsonate; (2) S-adenosyl-L-methionine + methylarsonite = S-adenosyl-L-homocysteine + dimethylarsinate |
| **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 ℃. |