Creative Enzymes®

# caffeine synthase

*Cat. No. EXWM-1757*

*Lot. No.* (See product label)

## Introduction

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| ***Description*** | Paraxanthine is the best substrate for this enzyme but the paraxanthine pathway is considered to be a minor pathway for caffeine biosynthesis. |
| ***Synonyms*** | dimethylxanthine methyltransferase; 3N-methyltransferase; DXMT; CCS1; S-adenosyl-L-methionine:3,7-dimethylxanthine 1-N-methyltransferase |

## Product Information

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| ***Form*** | Liquid or lyophilized powder |
| ***EC Number*** | EC 2.1.1.160 |
| ***Reaction*** | (1) S-adenosyl-L-methionine + 3,7-dimethylxanthine = S-adenosyl-L-homocysteine + 1,3,7-trimethylxanthine; (2) S-adenosyl-L-methionine + 1,7-dimethylxanthine = S-adenosyl-L-homocysteine + 1,3,7-trimethylxanthine; (3) S-adenosyl-L-methionine + 7-methylxanthine = S-adenosyl-L-homocysteine + 3,7-dimethylxanthine |
| ***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 ℃. |