Creative Enzymes®

# mycolipanoate synthase

*Cat. No. EXWM-2202*

*Lot. No.* (See product label)

## Introduction

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|---|---|
| ***Description*** | This mycobacterial enzyme accepts long-chain fatty acyl groups from their CoA esters and extends them by incorporation of three methylmalonyl (but not malonyl) residues, forming trimethyl-branched fatty-acids such as (2S,4S,6S)-2,4,6-trimethyltetracosanoate (C27-mycolipanoate). Since the enzyme lacks a thioesterase domain, the product remains bound to the enzyme and requires additional enzyme(s) for removal. |
| ***Synonyms*** | msl3 (gene name); Pks3/4; mycolipanoic acid synthase |

## Product Information

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| ***Form*** | Liquid or lyophilized powder |
| ***EC Number*** | EC 2.3.1.252 |
| ***Reaction*** | a long-chain acyl-CoA + 3 (R)-methylmalonyl-CoA + 6 NADPH + 6 H+ + holo-[mycolipanoate synthase] = mycolipanoyl-[mycolipanoate synthase] + 4 CoA + 3 CO2 + 6 NADP+ + 3 H2O |
| ***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 ℃. |