

mycolipanoate synthase

Cat. No. EXWM-2202

Lot. No. (See product label)

Introduction

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

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

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.