

## L-evernosamine nitrososynthase

Cat. No. EXWM-0786

Lot. No. (See product label)

### Introduction

**Description** Requires FAD. Isolated from the bacterium *Micromonospora carbonacea* var. *africana*. The nitroso group is probably spontaneously oxidized to a nitro group giving dTDP-β-L-evernitrose, which is involved in the biosynthesis of the antibiotic everninomycin. The reaction was studied using dTDP-β-L-4-epi-vancosamine (dTDP-4-O-desmethyl-β-L-evernitrosamine).

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.14.13.187

**Reaction** dTDP-β-L-evernosamine + 2 NADPH + 2 H<sup>+</sup> + 2 O<sub>2</sub> = dTDP-2,3,6-trideoxy-3-C-methyl-4-O-methyl-3-nitroso-β-L-arabino-hexopyranose + 2 NADP<sup>+</sup> + 3 H<sub>2</sub>O (overall reaction); (1a) dTDP-β-L-evernosamine + NADPH + H<sup>+</sup> + O<sub>2</sub> = dTDP-N-hydroxy-β-L-evernosamine + NADP<sup>+</sup> + H<sub>2</sub>O; (1b) dTDP-N-hydroxy-β-L-evernosamine + NADPH + H<sup>+</sup> + O<sub>2</sub> = dTDP-2,3,6-trideoxy-3-C-methyl-4-O-methyl-3-nitroso-β-L-arabino-hexopyranose + NADP<sup>+</sup> + 2 H<sub>2</sub>O

**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.