

peptidoglycan glycosyltransferase

Cat. No. EXWM-2354

Lot. No. (See product label)

Introduction

Description

The enzyme also works when the lysine residue is replaced by meso-2,6-diaminoheptanedioate (meso-2,6-diaminopimelate, A2pm) combined with adjacent residues through its L-centre, as it is in Gram-negative and some Gram-positive organisms. The undecaprenol involved is ditrans,octacis-undecaprenol (for definitions, click here). Involved in the synthesis of cell-wall peptidoglycan.

Synonyms

PG-II; bactoprenyldiphospho-N-acetylmuramoyl-(N-acetyl-D-glucosaminyl)-pentapeptide:peptidoglycan N-acetylmuramoyl-N-acetyl-D-glucosaminyltransferase; penicillin binding protein (3 or 1B); peptidoglycan transglycosylase; undecaprenyldiphospho-(N-acetyl-D-glucosaminyl-(1→4)-N-acetyl-D-muramoylpentapeptide):undecaprenyldiphospho-(N-acetyl-D-glucosaminyl-(1→4)-N-acetyl-D-muramoylpentapeptide) disaccharidetransferase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.4.1.129

CAS No.

79079-04-2

Reaction

$[\text{GlcNAc}-(1\rightarrow4)\text{-Mur2Ac}(\text{oyl-L-Ala-}\gamma\text{-D-Glu-L-Lys-D-Ala-D-Ala})]_n\text{-diphosphoundecaprenol} + \text{GlcNAc}-(1\rightarrow4)\text{-Mur2Ac}(\text{oyl-L-Ala-}\gamma\text{-D-Glu-L-Lys-D-Ala-D-Ala})\text{-diphosphoundecaprenol} = [\text{GlcNAc}-(1\rightarrow4)\text{-Mur2Ac}(\text{oyl-L-Ala-}\gamma\text{-D-Glu-L-Lys-D-Ala-D-Ala})]_{n+1}\text{-diphosphoundecaprenol} + \text{undecaprenyl diphosphate}$

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.