

## UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-L-lysine ligase

Cat. No. EXWM-5770

Lot. No. (See product label)

### Introduction

#### Description

Involved in the synthesis of a cell-wall peptide in bacteria. This enzyme adds lysine in some Gram-positive organisms; in others and in Gram-negative organisms EC 6.3.2.13 (UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-2,6-diaminopimelate ligase) adds 2,6-diaminopimelate instead.

#### Synonyms

MurE synthetase; UDP-N-acetylmuramoyl-L-alanyl-D-glutamyl-L-lysine synthetase; uridine diphospho-N-acetylmuramoylalanyl-D-glutamyllysine synthetase; UPD-MurNAc-L-Ala-D-Glu:L-Lys ligase; UDP-N-acetylmuramoyl-L-alanyl-D-glutamate:L-lysine  $\gamma$ -ligase (ADP-forming)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 6.3.2.7

#### CAS No.

9023-51-2

#### Reaction

ATP + UDP-N-acetyl- $\alpha$ -D-muramoyl-L-alanyl-D-glutamate + L-lysine = ADP + phosphate + UDP-N-acetyl- $\alpha$ -D-muramoyl-L-alanyl- $\gamma$ -D-glutamyl-L-lysine

#### 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.