

## UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-2,6-diaminopimelate ligase

Cat. No. EXWM-5734

Lot. No. (See product label)

### Introduction

#### Description

Involved in the synthesis of a cell-wall peptide in bacteria. This enzyme adds diaminopimelate in Gram-negative organisms and in some Gram-positive organisms; in others EC 6.3.2.7 (UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-L-lysine ligase) adds lysine instead. It is the amino group of the L-centre of the diaminopimelate that is acylated.

#### Synonyms

MurE synthetase [ambiguous]; UDP-N-acetylmuramoyl-L-alanyl-D-glutamate:meso-2,6-diamino-heptanedioate ligase (ADP-forming); UDP-N-acetylmuramoyl-L-alanyl-D-glutamyl-meso-2,6-diaminopimelate synthetase; UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-2,6-diaminopimelate ligase; UDP-N-acetylmuramoyl-L-alanyl-D-glutamate:meso-2,6-diaminoheptanedioate  $\gamma$ -ligase (ADP-forming)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 6.3.2.13

#### CAS No.

9075-09-6

#### Reaction

ATP + UDP-N-acetyl- $\alpha$ -D-muramoyl-L-alanyl-D-glutamate + meso-2,6-diaminoheptanedioate = ADP + phosphate + UDP-N-acetyl- $\alpha$ -D-muramoyl-L-alanyl- $\gamma$ -D-glutamyl-meso-2,6-diaminoheptanedioate

#### 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.