

## UDP-N-acetylmuramate-L-alanyl-γ-D-glutamyl-meso-2,6-diaminoheptanedioate ligase

Cat. No. EXWM-5763

Lot. No. (See product label)

### Introduction

#### Description

The enzyme catalyses the reincorporation into peptidoglycan of the tripeptide L-alanyl-γ-D-glutamyl-2,6-meso-diaminoheptanedioate released during the maturation and constant remodeling of this bacterial cell wall polymer that occur during cell growth and division. The enzyme can also use the tetrapeptide L-alanyl-γ-D-glutamyl-meso-2,6-diaminoheptanedioyl-D-alanine or the pentapeptide L-alanyl-γ-D-glutamyl-meso-2,6-diaminoheptanedioyl-D-alanyl-D-alanine in vivo and in vitro. Requires Mg<sup>2+</sup>.

#### Synonyms

murein peptide ligase; Mpl; yjfG (gene name); UDP-MurNAc:L-Ala-γ-D-Glu-meso-A2pm ligase; UDP-N-acetylmuramate:L-alanyl-γ-D-glutamyl-meso-diaminopimelate ligase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 6.3.2.45

#### Reaction

ATP + UDP-N-acetyl-α-D-muramate + L-alanyl-γ-D-glutamyl-meso-2,6-diaminoheptanedioate = ADP + phosphate + UDP-N-acetylmuramoyl-L-alanyl-γ-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.