

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-diaminoheptanedioate ligase (ADP-forming); UDP-N-acetylmuramoyl-L-alanyl-D-glutamyl-meso-2,6-diaminopimelate synthetase; UDP-N-acetylmuramoylalanyl-D-glutamate-2,6-diaminopimelate ligase; UDP-N-acetylmuramoyl-L-alanyl-D-glutamate:meso-2,6-diaminoheptanedioate γ -ligase (ADP-forming)

Product Information

Form Liquid or lyophilized powder

EC Number EC 6.3.2.13

CAS No. 9075-09-6

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

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.