Creative Enzymes®

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-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	ATP + UDP-N-acetyl-α-D-muramoyl-L-alanyl-D-glutamate + meso-2,6-diaminoheptanedioate = ADP + phosphate + UDP-N-acetyl-α-D-muramoyl-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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.