Creative Enzymes®

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