Creative Enzymes®

dapdiamide synthase

Cat. No. EXWM-5765

Lot. No. (See product label)

Introduction

Description	The enzyme, characterized from the bacterium Pantoea agglomerans, is involved in biosynthesis of dapdiamide tripeptide antibiotics, a family of fumaramoyl- and epoxysuccinamoyl-peptides named for the presence of an (S)-2,3-diaminopropanoate (DAP) moiety and two amide linkages in their scaffold.
Synonyms	DdaF; dapdiamide A synthase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 6.3.2.47
Reaction	(1) ATP + 3-{[(2E)-4-amino-4-oxobut-2-enoyl]amino}-L-alanine + L-valine = ADP + phosphate + 3-{[(2E)-4-amino-4-oxobut-2-enoyl]amino}-L-alanyl-L-valine; (2) ATP + 3-{[(2E)-4-amino-4-oxobut-2-enoyl]amino}-L-alanine + L-isoleucine = ADP + phosphate + 3-{[(2E)-4-amino-4-oxobut-2-enoyl]amino}-L-alanyl-L-isoleucine; (3) ATP + 3-{[(2E)-4-amino-4-oxobut-2-enoyl]amino}-L-alanine + L-leucine = ADP + phosphate + 3-{[(2E)-4-amino-4-oxobut-2-enoyl]amino}-L-alanyl-L-leucine; (4) ATP + 3-({[(2R,3R)-3-carbamoyloxiran-2-yl]carbonyl}amino)-L-alanine + L-valine = ADP + phosphate + 3-({[(2R,3R)-3-carbamoyloxiran-2-yl]carbonyl}amino)-L-alanyl-L-valine
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 ℃.