Creative Enzymes®

enterobactin synthase

Cat. No. EXWM-5735

Lot. No. (See product label)

Introduction

Description	This enzyme complex catalyses the conversion of three molecules each of 2,3-dihydroxybenzoate and L-serine to form the siderophore enterobactin. In Escherichia coli the complex is formed by EntB (an aryl carrier protein that has to be activated by 4'-phosphopantetheine), EntD (a phosphopantetheinyl transferase that activates EntB), EntE (catalyses the ATP-dependent condensation of 2,3-dihydroxybenzoate and holo-EntB to form the covalently arylated form of EntB), and EntF (a four domain protein that catalyses the activation of L-serine by ATP, the condensation of the activated L-serine with the activated 2,3-dihydroxybenzoate, and the trimerization of three such moieties to a single enterobactin molecule).
Synonyms	N-(2,3-dihydroxybenzoyl)-serine synthetase; 2,3-dihydroxybenzoylserine synthetase; 2,3-dihydroxybenzoate-serine ligase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 6.3.2.14
CAS No.	37318-63-1
Reaction	6 ATP + 3 2,3-dihydroxybenzoate + 3 L-serine = enterobactin + 6 AMP + 6 diphosphate
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 ℃.