

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 $6 \text{ ATP} + 3 \text{ 2,3-dihydroxybenzoate} + 3 \text{ L-serine} = \text{enterobactin} + 6 \text{ AMP} + 6 \text{ diphosphate}$

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 °C for short term. For long term storage, store it at -20 °C~-80 °C.