

L-cysteine:1D-myo-inositol 2-amino-2-deoxy- α -D-glucopyranoside ligase

Cat. No. EXWM-5716

Lot. No. (See product label)

Introduction

Description

This enzyme is a key enzyme in the biosynthesis of mycothiol, a small molecular weight thiol found in *Mycobacteria* spp. and other actinomycetes. Mycothiol plays a fundamental role in these organisms by helping to provide protection from the effects of reactive oxygen species and electrophiles, including many antibiotics. The enzyme may represent a novel target for new classes of antituberculars.

Synonyms

MshC; MshC ligase; Cys:GlcN-Ins ligase; mycothiol ligase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 6.3.1.13

Reaction

1-O-(2-amino-2-deoxy- α -D-glucopyranosyl)-1D-myo-inositol + L-cysteine + ATP = 1-O-[2-(L-cysteinamido)-2-deoxy- α -D-glucopyranosyl]-1D-myo-inositol + AMP + 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.