Creative Enzymes®

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