

long-chain-fatty-acid-protein ligase

Cat. No. EXWM-5677

Lot. No. (See product label)

Introduction

Description Together with a hydrolase component (EC 3.1.2.2/EC 3.1.2.14) and a reductase component (EC 1.2.1.50), this enzyme forms a multienzyme fatty acid reductase complex that produces the long-chain aldehyde substrate of the bacterial luciferase enzyme (EC 1.14.14.3). The enzyme activates free long-chain fatty acids, generated by the action of the transferase component, forming a fatty acyl-AMP intermediate, followed by the transfer of the acyl group to an internal L-cysteine residue. It then transfers the acyl group to EC 1.2.1.50, long-chain acyl-protein thioester reductase.

Synonyms luxE (gene name); acyl-protein synthetase; long-chain-fatty-acid-luciferin-component ligase

Product Information

Form Liquid or lyophilized powder

EC Number EC 6.2.1.19

CAS No. 82657-98-5

Reaction $\text{ATP} + \text{a long-chain fatty acid} + [\text{protein}]\text{-L-cysteine} = \text{AMP} + \text{diphosphate} + \text{a } [\text{protein}]\text{-S-(long-chain-acyl)-L-cysteine}$

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.