Creative Enzymes®

long-chain acyl-protein thioester reductase

Cat. No. EXWM-1154

Lot. No. (See product label)

Introduction

Description	Together with a hydrolase component (EC 3.1.2.2 and EC 3.1.2.14) and a synthetase component (EC 6.2.1.19), 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 is acylated by receiving an acyl group from EC 6.2.1.19, and catalyses the reduction of the acyl group, releasing the aldehyde product. The enzyme is also able to accept the acyl group from a long-chain acyl-CoA.
Synonyms	luxC (gene name); acyl-CoA reductase; acyl coenzyme A reductase; long-chain-aldehyde:NADP+ oxidoreductase (acyl-CoA-forming); long-chain-fatty-acyl-CoA reductase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.2.1.50
CAS No.	50936-56-6
Reaction	a long-chain aldehyde + [protein]-L-cysteine + NADP+ = a [protein]-S-(long-chain fatty acyl)-L-cysteine + NADPH + H+;
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 ℃.