Creative Enzymes®

Native Pseudomonas fluorescens Cholesterol Esterase

Cat. No. NATE-0116

Lot. No. (See product label)

Introduction

Description Cholesterol esterase (CE) is a reversible enzyme that can hydrolyze or synthesize fatty acid esters of cholesterol and other sterols. Hydrolysis of water insoluble long chain fatty acid esters requires bile salt activation. Hydrolysis of water soluble esters of short chain fatty acids and lysophospholipids does not require activation by bile salts. It also hydrolyzes tri-, di-, and mono-acylglycerols, phospholipids, lysophospholipids, and ceramide. This monomeric glycoprotein may have multiple functions in lipid and lipoprotein metabolism, as well as in atherosclerosis.

Applications Cholesterol esterase from Pseudomonas fluorescens has been used in an optimization study of components in enzymatic cholesterol reagents containing cholesterol oxidase. Cholesterol esterase from Pseudomonas fluorescens has also been used in a study to investigate the nondenaturing protein electrotransfer of the esterase activity of lipolytic preparations. This enzyme is widely used in the determination of serum cholesterol in diagnostic laboratories.

Synonyms cholesterol esterase; cholesteryl ester synthase; triterpenol esterase; cholesteryl esterase; cholesteryl ester hydrolase; sterol ester hydrolase; cholesterol ester hydrolase; cholesterase; acylcholesterol lipase; EC 3.1.1.13; 9026-00-0; sterol esterase; CE

Product Information

Source Pseudomonas fluorescens

Form lyophilized powder.

EC Number EC 3.1.1.13

CAS No. 9026-00-0

Activity > 10,000 units/g protein

Buffer 0.4 M potassium phosphate, pH 7.0: soluble 1.0 mg/mL

Unit Definition One unit will hydrolyze 1.0 µmole of cholesteryl oleate to cholesterol and oleic acid per min at pH 7.0 at 37°C in the presence of taurocholate.

Storage and Shipping Information

Storage −20°C