

Native Pseudomonas sp. Cholesterol Esterase

Cat. No. DIA-134

Lot. No. (See product label)

Introduction

Description

Sterol esterase belongs to the family of hydrolases, specifically those acting on carboxylic ester bonds. The systematic name of this enzyme class is sterol-ester acylhydrolase. This enzyme participates in bile acid biosynthesis.

Applications

This enzyme is useful for enzymatic determination of total cholesterol when coupled with cholesterol oxidase in clinical analysis.

Synonyms

cholesterol esterase; cholesteryl ester synthase; triterpenol esterase; cholesteryl esterase; cholesteryl ester hydrolase; sterol ester hydrolase; cholesterol ester hydrolase; cholesterolase; acylcholesterol lipase; EC 3.1.1.13; Sterol esterase

Product Information

Source

Pseudomonas sp.

Appearance

Light brown amorphous powder, lyophilized

EC Number

EC 3.1.1.13

CAS No.

9026-00-0

Molecular Weight

approx. 300 kDa

Activity

Grade III 100U/mg-solid or more (containing approx. 40% of stabilizers)

Contaminants

Catalase < $1.0 \times 10^{-2}\%$

Isoelectric point

5.9±0.1

pH Stability

pH 5.0-9.0 (25°C, 24hr)

Optimum pH

7.0-9.0

Thermal stability

below 55°C (pH 7.5, 10min)

Optimum temperature

40°C

Michaelis Constant

$5.4 \times 10^{-5}\text{M}$ (Linoleate), $6.6 \times 10^{-5}\text{M}$ (Oleate), $3.7 \times 10^{-5}\text{M}$ (Linolenate), $1.5 \times 10^{-4}\text{M}$ (Palmitate), $1.2 \times 10^{-4}\text{M}$ (Myristate), $2.3 \times 10^{-5}\text{M}$ (Stearate)

Inhibitors

Hg⁺⁺, Ag⁺, ionic detergents

Stabilizers

Mg⁺⁺, Na-cholate, bovine serum albumin

Storage and Shipping Information

Stability

Stable at -20°C for at least one year