Creative Enzymes®

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 steryl-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; cholesterase; 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	GradeIII 100U/mg-solid or more (containing approx. 40% of stabilizers)
Contaminants	Catalase < 1.0×10^{-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	5.4×10^{-5}M (Linoleate), 6.6×10^{-5}M (Oleate), 3.7×10^{-5}M (Linolenate), 1.5×10^{-4}M (Palmitate), 1.2×10^{-4}M (Myristate), 2.3×10^{-5}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