

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 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