

Native Microorganism Cholesterol Oxidase

Cat. No. DIA-138

Lot. No. (See product label)

Introduction

Description	Recombinant Cholesterol Oxidase belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with oxygen as acceptor. This enzyme participates in bile acid biosynthesis.
Applications	This enzyme is useful for enzymatic determination of cholesterol in serum when coupled with cholesterol esterase in clinical analysis.
Synonyms	Cholesterol-O2 oxidoreductase; 3 beta-Hydroxy steroid oxidoreductase; 3 β -hydroxysteroid: oxygen oxidoreductase; cholesterol: oxygen oxidoreductase; cholesterol oxidase; EC 1.1.3.6

Product Information

Source	Microorganism
Appearance	Yellowish amorphous powder, lyophilized
EC Number	EC 1.1.3.6
CAS No.	9028-76-6
Molecular Weight	approx. 55 kDa (by gel-filtration)
Activity	GradeIII 12U/mg-solid or more
Contaminants	Catalase < 1.0 $\times 10^{-1}$ % Cholesterol esterase < 1.0 $\times 10^{-2}$ %
pH Stability	pH 5.0-10.0 (25°C, 20hr)
Optimum pH	7.0-8.0
Thermal stability	below 60°C (pH 7.0, 15min)
Optimum temperature	60°C
Michaelis Constant	3.0 $\times 10^{-5}$ M(Cholesterol)
Inhibitors	Ionic detergents, Hg ⁺⁺
Stabilizers	Bovine serum albumin, amino acids

Storage and Shipping Information

Stability	Stable at -20°C for at least 9 months
------------------	---------------------------------------