

# **Cholesterol Esterase (CE)**

Catalog Number

LDG0028RG

Package

Customized package

For full product information, images and publications, please visit our website.



# Overview

#### Description

Cholesterol esterase (CE) is an enzyme that plays a crucial role in lipid metabolism by hydrolyzing cholesterol esters into free cholesterol and fatty acids. It is primarily found in the pancreas, liver, and intestines, where it aids in the digestion and absorption of dietary cholesterol. CE is also involved in the regulation of cholesterol levels within the body, influencing processes such as the formation of bile acids and lipoprotein metabolism. Its activity is essential for maintaining lipid homeostasis and overall cardiovascular health.

## **Specifications**

Expression system	Unit Definition
Escherichia coli	One unit causes the formation of one micromole of hydrogen peroxide (half a micromole of quinoneimine dye) per minute under the detailed conditions below.
Reaction Condition	Form
6.25 mM KH2PO4, 0.225 mM Cholesterol linoleate, 1.2 mM 4-Aminoantipyrine, 23.9 mM Phenol, 375 U Peroxidase, 750 U Cholesterol oxidase	Lyophilized

# Instruction

#### Reconstitution

It is recommended to reconstitute the lyophilized powder 10 mg in 1 mL double-distilled water directly and incubate the solution for at least 10 mins to ensure sufficient re-dissolved.

#### Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

### Tainan Headquarter

Innovation & Research Center

**CLD** Center

& +886-6-2536677

& +886-2-27065528

☑ bd@leadgene.com.tw

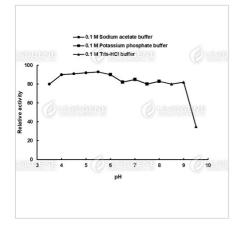


**Stability & Storage** 

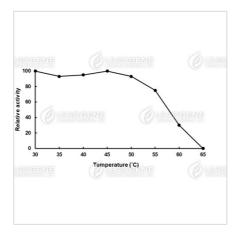
This product is stable at -20°C for long-term storage under sterile conditions.

Avoid repeated free-thaw cycles.

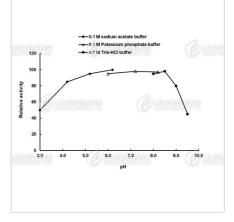
## Image



pH stability of Cholesterol esterase. The enzyme powder was reconstituted by double-distilled water and treated with different pH buffer conditions for 24 hours.



Thermal stability of Cholesterol esterase. The enzyme powder was reconstituted by double-distilled water and treated with different temperature for 15 minutes.



pH activity of Cholesterol esterase. The buffer conditions with various pH values were used in the reaction.

#### **Tainan Headquarter**

# Innovation & Research Center

### CLD Center

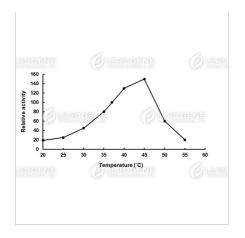
& +886-6-2536677

& +886-2-27065528

& +88<u>6-6-2536677</u>

☑ bd@leadgene.com.tw





Temperature activity of Cholesterol esterase. The enzyme reactions in 0.1 M Sodium acetate buffer, pH 5.5, were carried out under different temperature.

Disclaimer : For Research Use or Further Manufacturing Only.

### **Tainan Headquarter**

Innovation & Research Center

**CLD** Center

& +886-6-2536677

& +886-6-253<u>6677</u>

☑ bd@leadgene.com.tw