

# rCO

## Cholesterol oxidase, recombinant from *Nocardia sp.*

Cholesterol : oxygen oxidoreductase (EC 1.1.3.6)

### Host cell : *E. coli*

#### Reaction Equation



#### Specification

##### Specific Activity

IU/mg protein

##### Contaminants

Glucose oxidase  
Catalase  
Uricase

Specifications  
>20 units

<0.01%  
<1.00%  
<0.01%

#### Assay Procedure

##### I . Spectrophotometric Method

Wavelength ; 240 nm, Light path length ; 1 cm,  
Temperature ; 37°C

Pipette the following reagents into a cuvette

2.95 mL Potassium phosphate buffer (0.1 mol/L, pH 7.0)  
containing Thion X-100 (0.05 w/v%)  
0.05 mL Cholesterol (6 mmol/L) dissolved in Isopropanol  
0.10 mL rCO (about 0.5 IU/mL)

##### II . Calculation

$$\frac{\Delta A/\text{min} \cdot V \cdot D}{12.3 \cdot d \cdot v} = \text{IU/mL}$$

$\Delta A/\text{min}$  = The change in absorbance at 240 nm/minute

V = Total volume of reaction mixture (3.10 mL)

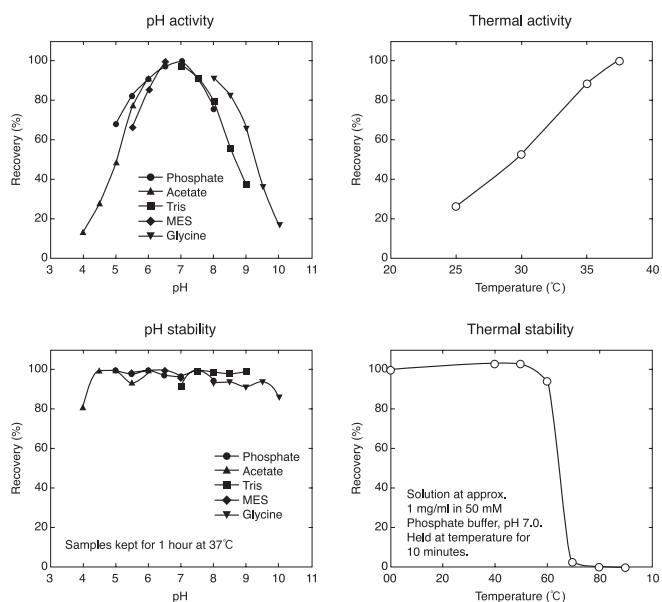
D = Enzyme dilution factor

12.3 = mM extinction coefficient of Cholestenone  
( $\text{L} \cdot \text{mmol}^{-1} \cdot \text{cm}^{-1}$ )

d = Light path length (1 cm)

v = Volume of enzyme sample (0.10 mL)

#### Reference Data



#### Preparation and storage

Product Code : rCO-03

Lyophilized powder (contains no ammonium sulfate)  
.....below -20°C

IU per 1 mg powder is approximately 50 units.

#### OYC No./Package

OYC No.	Package
46703003	100 units
46438003	1,000 units
46483903	Bulk

(Research reagent use only, not for medical use.)

