

## Cholesterol oxidase from E. coli, Recombinant

Cat. No. DIA-406

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.

**Synonyms** EC 1.1.3.6, cholesterol-O<sub>2</sub> oxidoreductase; 3 $\beta$ -hydroxy steroid oxidoreductase; 3 $\beta$ -hydroxysteroid:oxygen oxidoreductase; 9028-76-6

### Product Information

**Species** E. coli

**Source** E. coli

**Appearance** Yellow lyophilizate

**EC Number** EC 1.1.3.6

**CAS No.** 9028-76-6

**Molecular Weight** ca. 58 kDa

**Activity** > 5 U/mg lyophilizate

**Contaminants** catalase < 2.0% cholesterol esterase < 0.02%

**pH Stability** 5.0–10.0

**Optimum pH** 7

**Thermal stability** below 55°C

**Optimum temperature** 50°C

**Michaelis Constant**  $3.5 \times 10^{-4}$  M (cholesterol)

**Structure** monomer of 55 kDa (SDS-PAGE)

**Inhibitors** ionic detergents, Ag<sup>+</sup>, Hg<sup>2+</sup>

**Unit Definition** One unit (U) is defined as the amount of enzyme which produces 1  $\mu$ mol of hydrogen peroxide per min at 37°C and pH 7.0.