

## 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-O2 oxidoreductase; 3 $\beta$ -hydroxy steroid oxidoreductase; 3 $\beta$ -hydroxysteroid:oxygen oxidoreductase; 9028-76-6

### Product Information

|                            |   |
|----------------------------|---|
| <b>Species</b>             | E. coli   |
| <b>Source</b>              | E. coli   |
| <b>Appearance</b>          | Yellow lyophilizate   |
| <b>EC Number</b>           | EC 1.1.3.6  |
| <b>CAS No.</b>             | 9028-76-6   |
| <b>Molecular Weight</b>    | ca. 58 kDa  |
| <b>Activity</b>            | > 5 U/mg lyophilizate   |
| <b>Contaminants</b>        | catalase < 2.0% cholesterol esterase < 0.02%  |
| <b>pH Stability</b>        | 5.0–10.0  |
| <b>Optimum pH</b>          | 7   |
| <b>Thermal stability</b>   | below 55°C  |
| <b>Optimum temperature</b> | 50°C  |
| <b>Michaelis Constant</b>  | 3.5 x 10 <sup>-4</sup> M (cholesterol)  |
| <b>Structure</b>           | monomer of 55 kDa (SDS-PAGE)  |
| <b>Inhibitors</b>          | ionic detergents, Ag <sup>+</sup> , Hg <sup>2+</sup>  |
| <b>Unit Definition</b>     | 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. |