

## Native *Schizophyllum commune* Cholesterol Esterase

Cat. No. DIA-133

Lot. No. (See product label)

### Introduction

**Description** Sterol esterase belongs to the family of hydrolases, specifically those acting on carboxylic ester bonds. The systematic name of this enzyme class is steryl-ester acylhydrolase. This enzyme participates in bile acid biosynthesis.

**Applications** This enzyme is useful for enzymatic determination of total cholesterol when coupled with cholesterol oxidase in clinical analysis.

**Synonyms** cholesterol esterase; cholesteryl ester synthase; triterpenol esterase; cholesteryl esterase; cholesteryl ester hydrolase; sterol ester hydrolase; cholesterol ester hydrolase; cholesterase; acylcholesterol lipase; EC 3.1.1.13; Sterol esterase

### Product Information

**Source** Schizophyllum commune

**Appearance** Light brown amorphous powder, lyophilized

**EC Number** EC 3.1.1.13

**CAS No.** 9026-00-0

**Molecular Weight** approx. 130 kDa

**Activity** Gradelll 2.0 U/mg-solid or more (containing approx. 20% of stabilizers)

**Isoelectric point** 4.1±0.1

**pH Stability** pH 2.5-7.5 (25°C, 20hr)

**Optimum pH** 4.8-8.0 (Cholesterol linoleate), 5.0 (serum)

**Thermal stability** below 55°C (pH 5.5, 10min)

**Optimum temperature** 55-60°C

**Michaelis Constant**  $3.9 \times 10^{-5}$ M (Linoleate),  $9.2 \times 10^{-5}$ M (Palmitate),  $6.3 \times 10^{-5}$ M (Decylate),  $8.8 \times 10^{-5}$ M (Propionate)

**Inhibitors** Heavy metal ions (Hg<sup>++</sup>, Ag<sup>+</sup>, Fe<sup>+++</sup>)

**Stabilizers** Na-Cholate

### Storage and Shipping Information

**Stability** Store at -20°C