

## Native *Bacillus* sp. Monoglyceride Lipase

Cat. No. NATE-0455

Lot. No. (See product label)

### Introduction

**Description** In enzymology, an acylglycerol lipase (EC 3.1.1.23) is an enzyme that catalyzes a chemical reaction that uses water molecules to break the glycerol monoesters of long-chain fatty acids. This enzyme belongs to the family of hydrolases, specifically those acting on carboxylic ester bonds. This enzyme participates in glycerolipid metabolism.

**Applications** Useful for enzymatic determination of triglyceride

**Synonyms** EC 3.1.1.23; acylglycerol lipase; glycerol-ester acylhydrolase; monoacylglycerol lipase; monoacylglycerolipase; monoglyceride lipase; monoglyceride hydrolase; fatty acyl monoester lipase; monoacylglycerol hydrolase; monoglyceridylipase; monoglyceridase

### Product Information

**Source** *Bacillus* sp.

**Appearance** White powder

**Form** Freeze dried powder

**EC Number** EC 3.1.1.23

**CAS No.** 9040-75-9

**Molecular Weight** 20 kDa (gel filtration)

**Activity** > 20 U/mg

**Contaminants** Catalase <0.5%

**Isoelectric point** pH 4.8±0.2

**pH Stability** 6.0-8.0 (65°C, 10 mins)

**Optimum pH** 6.0-8.0

**Thermal stability** Stable at 65°C and below (pH 8.0, 10 mins)

**Optimum temperature** 65°C (PIPES buffer)

**Michaelis Constant** Monolaurine  $1.8 \times 10^{-4}$ M

**Unit Definition** One unit is defined as the amount of enzyme which liberates 1  $\mu$ mole of monoglyceride per minute at 37°C under the conditions specified in the assay procedure.

### Storage and Shipping Information

**Storage** Storage at -20°C in the presence of a desiccant is recommended.

