

## Native Bovine Lipoprotein Lipase

Cat. No. NATE-0416

Lot. No. (See product label)

### Introduction

#### Description

Lipoprotein lipase (LPL) (EC 3.1.1.34) is a member of the lipase gene family, which includes pancreatic lipase, hepatic lipase, and endothelial lipase. It is a water-soluble enzyme that hydrolyzes triglycerides in lipoproteins, such as those found in chylomicrons and very low-density lipoproteins (VLDL), into two free fatty acids and one monoacylglycerol molecule. It is also involved in promoting the cellular uptake of chylomicron remnants, cholesterol-rich lipoproteins, and free fatty acids. LPL requires ApoC-II as a cofactor. LPL is attached to the luminal surface of endothelial cells in capillaries by the protein glycosylphosphatidylinositol HDL-binding protein 1 (GPIHBP1) and by heparin sulfated proteoglycans. It is most widely distributed in adipose, heart, and skeletal muscle tissue, as well as in lactating mammary glands.

#### Synonyms

lipoprotein lipase; clearing factor lipase; diglyceride lipase; diacylglycerol lipase; postheparin esterase; diglyceride lipase; postheparin lipase; diacylglycerol hydrolase; lipemia-clearing factor; EC 3.1.1.34; 9004-02-8; LPL

### Product Information

#### Species

Bovine

#### Source

Bovine milk

#### Form

ammonium sulfate suspension; Suspension in 3.8 M ammonium sulfate, 0.02 M Tris HCl, pH 8.0

#### EC Number

EC 3.1.1.34

#### CAS No.

9004-02-8

#### Activity

> 2,000 units/mg protein (BCA)

#### Pathway

Adipogenesis, organism-specific biosystem; Chylomicron-mediated lipid transport, organism-specific biosystem; Glycerolipid metabolism, conserved biosystem

#### Function

apolipoprotein binding; lipoprotein lipase activity; protein binding

#### Unit Definition

One unit will release 1.0 nmole of p-nitrophenol per min at pH 7.2 at 37°C using p-nitrophenyl butyrate as substrate.

### Storage and Shipping Information

#### Storage

2-8°C