

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