



Mouse lipoprotein lipase (LPL) ELISA kit (15.625-1000 pg/mL)

Cat. No.:	0126WXX-958
Assay Type:	Quantitative sandwich ELISA
Target Species:	Mouse
Assay Target:	LPL
Size:	48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description

Mouse lipoprotein lipase (LPL) ELISA kit (15.625-1000 pg/mL, 9.375 pg/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of LPL in mice samples with a range of 15.625-1000 pg/mL and a minimum detectable dose (sensitivity) of 9.375 pg/mL. The kit is highly sensitive and easy to use.

Assay Principle

This kit is based on sandwich ELISA technology. An anti-mouse LPL antibody is pre-coated onto 96-well plates, while a biotin-conjugated anti-mouse LPL antibody is used for detection. Standards, samples, and detection antibodies are added to the wells and washed. HRP-Streptavidin is added, and unbound conjugates are removed. TMB substrate visualizes the HRP reaction, turning yellow after adding the acidic stop solution. The density of yellow is proportional to the amount of mouse LPL captured, measured at 450 nm.

Background

LPL is an enzyme belonging to the lipoprotein lipase family. Its primary function is to break down triglycerides (a type of fat) in the blood. Specifically, LPL hydrolyzes triglycerides present in circulating lipoproteins such as chylomicrons and very low-density lipoproteins (VLDL). The free fatty acids and monoglycerides released during this process can be utilized by cells to generate energy or stored for later use. LPL's direct relevance to obesity research lies in its pivotal role in fat storage and metabolism. Given its central function in lipid metabolism, LPL has emerged as a key biological factor in obesity studies.



Synonyms	Clearing factor; Clearing factor lipase; EC 3.1.1.34
EC NO.	3.1.1.34
Formula Weight	53,162 Da
Applications	Mouse lipoprotein lipase (LPL) ELISA kit (15.625-1000 pg/mL, 9.375 pg/mL) is used to quantify LPL in serum, plasma, cell culture supernatant, cell or tissue lysate, and other liquid samples of mouse, providing data to support research in a wide range of areas, including signal transduction, metabolism, obesity, etc.
Research Area	Signal Transduction; Metabolism; Obesity

Specification

Sample Type	Serum; Plasma; Cell culture supernatant; Cell or tissue lysate; Other liquid samples
Detection Range	15.625-1000 pg/mL
Sensitivity	9.375 pg/mL
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at -20°C (microplate, standard) and 2-8°C (other reagents).