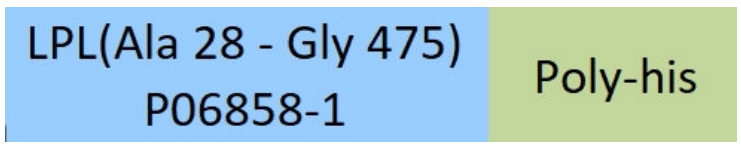
Synonym

Lipoprotein Lipase,LPL,LIPD,Phospholipase A1,EC:3.1.1.34

Source

Human Lipoprotein Lipase Protein, His Tag(LPL-H52H5) is expressed from CHO cells. It contains AA Ala 28 - Gly 475 (Accession # P06858-1).
Predicted N-terminus: Ala 28

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 52.3 kDa. The protein migrates as 55 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>85% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μm filtered solution in 50 mM Tris, 500 mM NaCl, 5 mM CHAPS, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

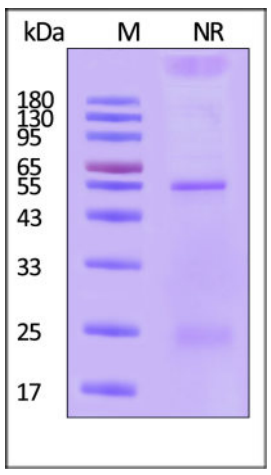
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



Human Lipoprotein Lipase Protein, His Tag on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 85% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity

Measured by its ability to hydrolyze 4-Nitrophenyl butyrate. The specific activity is >3200 pmol/min/μg (QC tested).

Background

Key enzyme in triglyceride metabolism. Catalyzes the hydrolysis of triglycerides from circulating chylomicrons and very low density lipoproteins (VLDL), and thereby plays an important role in lipid clearance from the blood stream, lipid utilization and storage. Although it has both phospholipase and triglyceride lipase

activities it is primarily a triglyceride lipase with low but detectable phospholipase activity. Mediates margination of triglyceride-rich lipoprotein particles in capillaries. Recruited to its site of action on the luminal surface of vascular endothelium by binding to GPIHBP1 and cell surface heparan sulfate proteoglycans.

Clinical and Translational Updates