

Recombinant Human LIPG / EDL Protein, His-tagged

Cat. No. LIPG-958H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human LIPG / EDL (rhLIPG) Ser21-Pro500 fused with a N-terminal his tag was produced in human HEK293 cells.
Species	Human
Source	HEK293
ProteinLength	21-500 a.a.
Description	Lipase endothelial (LIPG), also known as Endothelial lipase (EL/EDL). This protein has substantial phospholipase activity and may be involved in lipoprotein metabolism and vascular biology. LIPG is designated a member of the triglyceride (TG) lipase family by its sequence and characteristic lid region which provides substrate specificity for enzymes of the TG lipase family. LIPG mediates both HDL binding and uptake, and the selective uptake of HDL-CE, independently of lipolysis and CLA-1. LIPG also mediates binding and uptake of plasma lipoproteins via a process that is independent of its enzymatic activity, requires cellular heparan sulfate proteoglycans, and is regulated by ligand clustering. LIPG may have unique functional roles in the pathogenesis of coronary artery diseases such as atherosclerosis as well as in lipid metabolism in the vessel wall.
Purity	>92% as determined by SDS-PAGE.
Endotoxin	Less than 1.0 EU per 1 µg of the rhLIPG by the LAL method.

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Molecular Mass	55.4 kDa. Protein migrates as 55-65 kDa in reduced SDS-PAGE resulting from glycosylation.
Formulation	Supplied as a 0.22 µm filtered solution in PBS, pH 7.4 and delivered as liquid formulation or lyophilized powder. Normally mannitol or trehalose are added as protectants before lyophilization.
Storage	No activity loss was observed after storage at 4-8°C for 1 month or -20°C for 1 year in lyophilized state. rhLIPG should be aliquoted and stored at -80°C in liquid formulation, for long term storage. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	LIPG lipase, endothelial [Homo sapiens]
Official Symbol	LIPG
Synonyms	LIPG; Lipase, Endothelial; EL; EDL; PRO719; Endothelial lipase; EC 3.1.1.3; Endothelial cell-derived lipase; endothelial lipase; lipase, endothelial; lipoprotein lipase H
Gene ID	9388
mRNA Refseq	NM_006033
Protein Refseq	NP_006024
MIM	603684
UniProt ID	Q9Y5X9

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Chromosome Location	18q21.1
Pathway	Glycerolipid metabolism; Metabolic pathways
Function	heparin binding; hydrolase activity; lipoprotein lipase activity; phospholipase A1 activity; protein binding; triglyceride lipase activity

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