# Lipoprotein Lipase Human HEK293

## Product Data Sheet

**Type:** Recombinant
**Source:** HEK293
**Species:** Human
**Other names:** LPL, LIPD

**Cat. No.:**
RD172131100-HEK (0.1 mg)

## Description

Total 461 AA. MW: 51.8 kDa (calculated). N-Terminal Flag-tag, 13 extra AA (highlighted). Uniprot P06858 Ala28 to Gly475, variant Asn > Ser318.

## Introduction to the Molecule

Lipoprotein lipase (LPL) is the central enzyme in plasma triglyceride hydrolysis and is secreted by macrophages in the subendothelial space. Evidence has been provided that LPL produced by macrophages in the vessel wall exerts proatherogenic effects. The atherogenic effects of LPL have been mainly attributed to its ability to favor lipid accumulation within macrophages present in the atherosclerotic lesion. Recently, it has also been shown that LPL promote the development of atherosclerosis through facilitation of monocyte adhesion to endothelial cells, stimulation of tumor necrosis factor alpha (TNF ) secretion and induction of vascular smooth muscle cell proliferation.

## Research topic

Lipoprotein metabolism

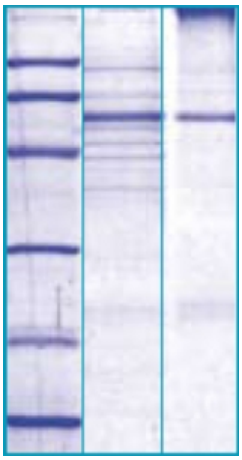
## Amino Acid Sequence

```
HVDYKDDDDK PAGADQRRDF IDIESKFALR TPEDTAEDTC HLIPGVAESV ATCHFNHSSK TFMVIHGWTV TGMYESWVPK
LVAALYKREP DSNVIVVDWL SRAQEHYPVS AGYTKLVGQD VARFINWMEE EFNYPLDNVH LLGYSLGAHA AGIAGSLTNK
KVNRITGLDP AGPNFEYAEA PSRLSPDDAD FVDVLHTFTR GSPGRSIGIQ KPVGHVDIYP NGGTFQPGCN IGEAIRVIAE
RGLGDVDQLV KCSHERSIHL FIDSLLNEEN PSKAYRCSSK EAFEKGLCLS CRKNRCNNLG YEISKVRAKR SSKMYLKTRS
QMPYKVFHYQ VKIHFSGTES ETHTNQAFEI SLYGTVAESE NIPFTLPEVS TNKTYSFLIY TEVDIGELLM LKLKWKSDSY
FSWSDWWSSP GFAIQKIRVK AGETQKKVIF CSREKVSHLQ KGKAPAVFVK CHDKSLNKKS G
```

## Source

HEK293

## SDS-PAGE gel



14% SDS-PAGE separation of Human LPL
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
2. reduced and heated sample, 5µg/lane
3. non-reduced and non-heated sample, 5µg/lane

## Endotoxin

< 1.0 EU/µg

## Formulation

Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 20mM Tris buffer, 50mM NaCl, pH 7.5

## Reconstitution

Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

## Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

## Storage, Stability/Shelf Life

Store lyophilized protein at -80°C. Lyophilized protein remains stable until the expiry date when stored at -80°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after one week at 4°C.

## Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL to determine quantity of endotoxin.

## Applications

Cell culture and/or animal studies, ELISA, Western blotting

## Note

This product is intended for research use only.

## References to this Product


- Miyashita K, Kobayashi J, Imamura S, Kinoshita N, Stanhope KL, Havel PJ, Nakajima K, Machida T, Sumino H, Nara M, Murakami M. *A new enzyme-linked immunosorbent assay system for human hepatic triglyceride lipase.* Clin Chim Acta. 2013 Sep 23;424:201-6



| | | | | | | |
|---|---|---|---|---|---|---|
| HEADQUARTERS:<br>BioVendor Laboratorní medicína, a.s. | Karasek 1767/1 | 621 00 Brno<br>CZECH REPUBLIC | Phone: +420-549-124-185<br>Fax: +420-549-211-460 | E-mail:<br><br>Web: | info@biovendor.com<br>sales@biovendor.com<br>www.biovendor.com |
| AUSTRIA:<br>BioVendor GesmbH | Nußdorfer Straße 20/10 | 1090 Vienna<br>AUSTRIA | Phone: +43-1-89090-25<br>Fax: +43-1-89090-2515 | E-mail: | infoAustria@biovendor.com |
| GERMANY, SWITZERLAND:<br>BioVendor GmbH | Otto-Hahn-Straße 16 | 34123 Kassel<br>GERMANY | Phone: +49-6221-433-9100<br>Fax: +49-6221-433-9111 | E-mail: | infoEU@biovendor.com |
| USA, CANADA AND MEXICO:<br>BioVendor LLC | 128 Bingham Rd.<br>Suite 1300 | Asheville, NC 28806<br>USA | Phone: +1-828-575-9250<br>+1-800-404-7807<br>Fax: +1-828-575-9251 | E-mail: | infoUSA@biovendor.com |