# abcam

# Product datasheet

# Recombinant Human Lipoprotein lipase abl 15504

## 1 Image

**Description** 

Product name Recombinant Human Lipoprotein lipase

Purity > 80 % Densitometry.

ab115504 is filtered (0.4 µm).

Expression system HEK 293 cells

Accession P06858

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

**Sequence** HVDYKDDDDKPAGADQRRDFIDIESKFALRTPEDTAEDTC

HLIPGVAESV

ATCHFNHSSKTFMVIHGWTVTGMYESWVPKLVAALYKRE

PDSNVIVVDWL

SRAQEHYPVSAGYTKLVGQDVARFINWMEEEFNYPLDNV

HLLGYSLGAHA

AGIAGSLTNKKVNRITGLDPAGPNFEYAEAPSRLSPDDAD

**FVDVLHTFTR** 

GSPGRSIGIQKPVGHVDIYPNGGTFQPGCNIGEAIRVIAERG

**LGDVDQLV** 

KCSHERSIHLFIDSLLNEENPSKAYRCSSKEAFEKGLCLS

CRKNRCNNLG

YEISKVRAKRSSKMYLKTRSQMPYKVFHYQVKIHFSGTES

ETHTNQAFEI

SLYGTVAESENIPFTLPEVSTNKTYSFLIYTEVDIGELLMLKL

**KWKSDSY** 

FSWSDWWSSPGFAIQKIRVKAGETQKKVIFCSREKVSHL

QKGKAPAVFVK CHDKSLNKKSG

Predicted molecular weight 52 kDa including tags

Amino acids 28 to 475

Tags DDDDK tag N-Terminus

**Description** Recombinant Human Lipoprotein lipase

**Specifications** 

1

#### opecinications

Our Abpromise quarantee covers the use of ab115504 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Western blot

Form Lyophilized

#### **Preparation and Storage**

**Stability and Storage** Shipped at 4°C. Store at -80°C.

pH: 7.50

Constituents: 0.24% Tris buffer, 0.29% Sodium chloride

**Reconstitution** Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the

lyophilized pellet dissolve completely. Aliquot reconstituted protein to avoid repeated

freezing/thawing cycles and store at  $-80^{\circ}$ C for long term storage. Reconstituted protein can be stored at  $4^{\circ}$ C for a limited period of time; it does not show any change after one week at  $4^{\circ}$ C.

#### **General Info**

**Function** The primary function of this lipase is the hydrolysis of triglycerides of circulating chylomicrons and

very low density lipoproteins (VLDL). Binding to heparin sulfate proteogylcans at the cell surface is vital to the function. The apolipoprotein, APOC2, acts as a coactivator of LPL activity in the

presence of lipids on the luminal surface of vascular endothelium.

Involvement in disease Defects in LPL are the cause of lipoprotein lipase deficiency (LPL deficiency) [MIM:238600]; also

known as familial chylomicronemia or hyperlipoproteinemia type I. LPL deficiency

chylomicronemia is a recessive disorder usually manifesting in childhood. On a normal diet, patients often present with abdominal pain, hepatosplenomegaly, lipemia retinalis, eruptive xanthomata, and massive hypertriglyceridemia, sometimes complicated with acute pancreatitis.

**Sequence similarities** Belongs to the AB hydrolase superfamily. Lipase family.

Contains 1 PLAT domain.

Post-translational

modifications

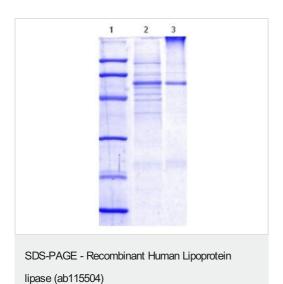
Tyrosine nitration after lipopolysaccharide (LPS) challenge down-regulates the lipase activity.

**Cellular localization**Cell membrane. Secreted. Locates to the plasma membrane of microvilli of hepatocytes with

triacyl-glycerol-rich lipoproteins (TRL). Some of the bound LPL is then internalized and located

inside non-coated endocytic vesicles.

#### **Images**



14% SDS-PAGE showing ab115504

Lane 1: M.W. marker - 14, 21, 31, 45, 66, 97 kDa

Lane 2: reduced and boiled sample, 5µg/lane.

Lane 3: non-reduced and non-boiled sample, 5µg/lane.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors