

# LIPT1 (P-16): sc-168436

## BACKGROUND

LIPT1 (lipoyltransferase 1), also known as lipoyl ligase, lipoate-protein ligase or lipoate biosynthesis protein, is a 373 amino acid mitochondrial protein that catalyzes the transfer of a lipoyl group to lipoate-dependent enzymes from lipoyl-AMP. A member of the LPLA family, LIPT1 is highly expressed in heart and skeletal muscle, with moderate levels found in pancreas and kidney, and low levels in lung, placenta, brain and liver. The gene encoding LIPT1 maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, sitosterolemia and Alström syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: LIPT1 (human) mapping to 2q11.2; Lipt1 (mouse) mapping to 1 B.

## SOURCE

LIPT1 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LIPT1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168436 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LIPT1 (P-16) is recommended for detection of LIPT1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LIPT1 (P-16) is also recommended for detection of LIPT1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for LIPT1 siRNA (h): sc-94383, LIPT1 siRNA (m): sc-146756, LIPT1 shRNA Plasmid (h): sc-94383-SH, LIPT1 shRNA Plasmid (m): sc-146756-SH, LIPT1 shRNA (h) Lentiviral Particles: sc-94383-V and LIPT1 shRNA (m) Lentiviral Particles: sc-146756-V.

Molecular Weight of LIPT1: 42 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.