

# LHFPL1 (Y-16): sc-243256

## BACKGROUND

LHFPL1 (lipoma HMGIC fusion partner-like 1 protein) is a 220 amino acid protein that widely expressed, with high levels found in the lungs, thymus, skeletal muscles, colon and ovaries. Belonging to the LHFPL family, LHFPL1 exists as three alternatively spliced isoforms. The gene that encodes LHFPL1 is located on the X chromosome. The X and Y chromosomes are the human sex chromosomes. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. The combination of an X and Y chromosome lead to normal male development while two copies of X lead to normal female development. There are a number of conditions related to an unusual number and combination of sex chromosomes being inherited, including Turner's syndrome, Klinefelter's syndrome and Triple X syndrome. Color blindness, hemophilia, and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

## REFERENCES

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3. Huang, C., et al. 2004. Isolation, tissue distribution and prokaryotic expression of a novel human X-linked gene LHFPL1. *DNA Seq.* 15: 299-302.
4. Deeb, S.S. 2005. The molecular basis of variation in human color vision. *Clin. Genet.* 67: 369-377.
5. Bojesen, A., et al. 2006. The metabolic syndrome is frequent in Klinefelter's syndrome and is associated with abdominal obesity and hypogonadism. *Diabetes Care* 29: 1591-1598.
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8. Kasper, C.K. and Buzin, C.H. 2009. Mosaicism and haemophilia. *Haemophilia*. E-published.

## CHROMOSOMAL LOCATION

Genetic locus: LHFPL1 (human) mapping to Xq23; Lhfp11 (mouse) mapping to X F2.

## SOURCE

LHFPL1 (Y-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LHFPL1 of human origin.

## STORAGE

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

## 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-243256 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LHFPL1 (Y-16) is recommended for detection of LHFPL1 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).

LHFPL1 (Y-16) is also recommended for detection of LHFPL1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LHFPL1 siRNA (h): sc-90998, LHFPL1 siRNA (m): sc-146720, LHFPL1 shRNA Plasmid (h): sc-90998-SH, LHFPL1 shRNA Plasmid (m): sc-146720-SH, LHFPL1 shRNA (h) Lentiviral Particles: sc-90998-V and LHFPL1 shRNA (m) Lentiviral Particles: sc-146720-V.

Molecular Weight of LHFPL1: 24/20/5 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.

## 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.