

LENG4 (Q-23): sc-133733

BACKGROUND

The membrane-bound O-acyltransferase family is a group of integral membrane proteins with acyltransferase activity. LENG4 (membrane bound O-acyltransferase domain containing 7), also known as lysophospholipid acyltransferase 7, leukocyte receptor cluster member 4, MBOAT7, BB1, LPLAT 7, LRC4 or OACT7, is a 472 amino acid multi-pass membrane protein involved in lipid and phospholipid metabolism. LENG4 belongs to the membrane-bound acyltransferase family and participates in the Land cycle by catalyzing reacylation of phospholipids. LENG4 is responsible for the conversion of lysophosphatidyl-inositol into phosphatidylinositol, and prefers arachidonoyl-CoA as its acyl donor. Overexpressed in metastatic breast and bladder carcinomas, LENG4 is downregulated by γ -interferon. Three LENG4 isoforms exist due to alternative splicing events, and LENG4 is encoded by a gene mapping to human chromosome 19q13.42.

REFERENCES

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2. Wende, H., Volz, A. and Ziegler, A. 2000. Extensive gene duplications and a large inversion characterize the human leukocyte receptor cluster. *Immunogenetics* 51: 703-713.
3. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 606048. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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6. Shindou, H., Hishikawa, D., Harayama, T., Yuki, K. and Shimizu, T. 2009. Recent progress on acyl CoA: lysophospholipid acyltransferase research. *J. Lipid Res.* 50: S46-S51.

CHROMOSOMAL LOCATION

Genetic locus: MBOAT7 (human) mapping to 19q13.42.

SOURCE

LENG4 (Q-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic LENG4 peptide of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

RESEARCH USE

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

APPLICATIONS

LENG4 (Q-23) is recommended for detection of LENG4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LENG4 siRNA (h): sc-97194, LENG4 shRNA Plasmid (h): sc-97194-SH and LENG4 shRNA (h) Lentiviral Particles: sc-97194-V.

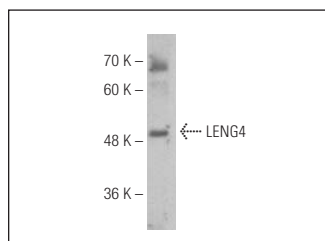
Molecular Weight of LENG4: 55 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



LENG4 (Q-23): sc-133733. Western blot analysis of LENG4 expression in Jurkat whole cell lysate.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.