

LPAAT- γ (E-16): sc-83190

BACKGROUND

Phosphatidic acid and lysophosphatidic acid are phospholipids involved in lipid biosynthesis and signal transduction. LPAAT- γ (lysophosphatidic acid acyltransferase gamma) catalyzes the synthesis of phosphatidic acid from lysophosphatidic acid. LPAAT- γ is a membrane-bound protein belonging to the LPAAT family. Members of the LPAAT family have a well-known role in lipid biosynthesis and they may also play a role in tumor progression. LPAAT- γ is ubiquitously expressed with highest levels found in testis, where it may play a role in the biogenesis of 1-stearoyl-2-arachidonoyl-phosphatidylinositol. In cardiac tissue, LPAAT- γ expression is regulated by PPAR α . The LPAAT- γ protein exists as three isoforms due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AGPAT3 (human) mapping to 21q22.3; Agpat3 (mouse) mapping to 10 C1.

SOURCE

LPAAT- γ (E-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of LPAAT- γ 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 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83190 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LPAAT- γ (E-16) is recommended for detection of LPAAT- γ of mouse, rat and 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)], 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).

LPAAT- γ (E-16) is also recommended for detection of LPAAT- γ in additional species, including equine and bovine.

Suitable for use as control antibody for LPAAT- γ siRNA (h): sc-91413, LPAAT- γ siRNA (m): sc-155916, LPAAT- γ shRNA Plasmid (h): sc-91413-SH, LPAAT- γ shRNA Plasmid (m): sc-155916-SH, LPAAT- γ shRNA (h) Lentiviral Particles: sc-91413-V and LPAAT- γ shRNA (m) Lentiviral Particles: sc-155916-V.

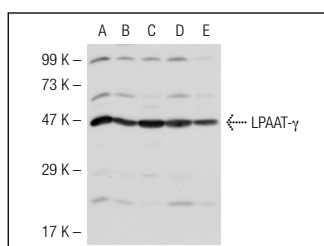
Molecular Weight of LPAAT- γ : 43/36/46 kDa.

Positive Controls: SW480 cell lysate: sc-2219, NIH/3T3 whole cell lysate: sc-2210 or HeLa whole cell lysate: sc-2200.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



LPAAT- γ (E-16): sc-83190. Western blot analysis of LPAAT- γ expression in HEK293 (A), HeLa (B), OV-90 (C), NIH/3T3 (D) and SW480 (E) whole cell lysates.

RESEARCH USE

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