

LPAAT- θ (D-15): sc-66784

BACKGROUND

Phosphatidic acid and lysophosphatidic acid are phospholipids involved in lipid biosynthesis and signal transduction. LPAAT- θ (lysophosphatidic acid acyltransferase θ) catalyzes the synthesis of phosphatidic acid from lysophosphatidic acid. LPAAT- θ 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- θ localizes to the endoplasmic reticulum and is expressed in numerous tissue types. Low expression levels are detected in brain, kidney, liver, pancreas, placenta, prostate and thymus. The overexpression of LPAAT- θ can induce FRAP-dependent p70 S6 kinase phosphorylation on Thr389 and 4E-BP1 phosphorylation on Ser65.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AGPAT9 (human) mapping to 4q21.23; Agpat9 (mouse) mapping to 5 E4.

RESEARCH USE

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

SOURCE

LPAAT- θ (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LPAAT- θ of human origin.

PRODUCT

Each vial contains 200 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-66784 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LPAAT- θ (D-15) is recommended for detection of LPAAT- θ 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).

LPAAT- θ (D-15) is also recommended for detection of LPAAT- θ in additional species, including equine and canine.

Suitable for use as control antibody for LPAAT- θ siRNA (h): sc-62565, LPAAT- θ siRNA (m): sc-62566, LPAAT- θ shRNA Plasmid (h): sc-62565-SH, LPAAT- θ shRNA Plasmid (m): sc-62566-SH, LPAAT- θ shRNA (h) Lentiviral Particles: sc-62565-V and LPAAT- θ shRNA (m) Lentiviral Particles: sc-62566-V.

Molecular Weight of LPAAT- θ : 42 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, LADMAC whole cell lysate: sc-364189 or KNRK whole cell lysate: sc-2214.

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.



Try **LPAAT- θ (G-3): sc-514164** or **LPAAT- θ (F-7): sc-514163**, our highly recommended monoclonal alternatives to LPAAT- θ (D-15).