

# LPAAT- $\theta$ (H-90): sc-68372

## BACKGROUND

Phosphatidic acid and lysophosphatidic acid are phospholipids involved in lipid biosynthesis and signal transduction. LPAAT- $\theta$  (lysophosphatidic acid acyltransferase  $\theta$ ) catalyzes the synthesis of phosphatidic acid from lysophosphatidic acid. LPAAT- $\theta$  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- $\theta$  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- $\theta$  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- $\theta$  (H-90) is a rabbit polyclonal antibody raised against amino acids 1-90 mapping at the N-terminus of LPAAT- $\theta$  of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

LPAAT- $\theta$  (H-90) is recommended for detection of LPAAT- $\theta$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

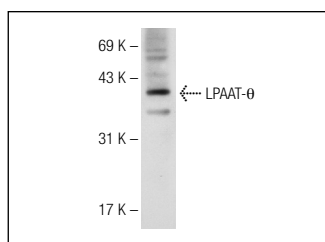
LPAAT- $\theta$  (H-90) is also recommended for detection of LPAAT- $\theta$  in additional species, including equine, canine, bovine and porcine.

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

Molecular Weight of LPAAT- $\theta$ : 42 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224.

## DATA



LPAAT- $\theta$  (H-90): sc-68372. Western blot analysis of LPAAT- $\theta$  expression in Caki-1 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.

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Satisfaction  
Guaranteed

Try **LPAAT- $\theta$  (G-3): sc-514164** or **LPAAT- $\theta$  (F-7): sc-514163**, our highly recommended monoclonal alternatives to LPAAT- $\theta$  (H-90).