

SEC14L2 (R-16): sc-32349

BACKGROUND

The monomeric, supernatant protein factor (SPF), also designated α -tocopherol-associated protein, functions as a carrier protein transferring tocopherols, as a transcriptional activator via its interaction with α -tocopherol and as a stimulator of conversion of microsomal squalene-2,3-oxide into lanosterol in cholesterol biosynthesis. High levels of SPF are expressed in liver, brain, intestine and prostate. Subcellular localization of SPF is cytoplasmic, but in the presence of α -tocopherol, SPF localizes in the nucleus. Activity of SPF depends on posttranslational modifications, specifically phosphorylation by PKA and PKC.

REFERENCES

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- Shibata, N., Arita, M., Misaki, Y., Dohmae, N., Takio, K., Ono, T., Inoue, K. and Arai, H. 2001. Supernatant protein factor, which stimulates the conversion of squalene to lanosterol, is a cytosolic squalene transfer protein and enhances cholesterol biosynthesis. *Proc. Natl. Acad. Sci. USA* 98: 2244-2249.
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- Stocker, A. and Baumann, U. 2003. Supernatant protein factor in complex with RRR- α -tocopherylquinone: a link between oxidized Vitamin E and cholesterol biosynthesis. *J. Mol. Biol.* 332: 759-765.

CHROMOSOMAL LOCATION

Genetic locus: Sec14l2 (mouse) mapping to 11 A1.

SOURCE

SEC14L2 (R-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SEC14L2 of rat 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-32349 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SEC14L2 (R-16) is recommended for detection of SEC14L2 of mouse and rat 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).

Suitable for use as control antibody for SEC14L2 siRNA (m): sc-44739, SEC14L2 shRNA Plasmid (m): sc-44739-SH and SEC14L2 shRNA (m) Lentiviral Particles: sc-44739-V.

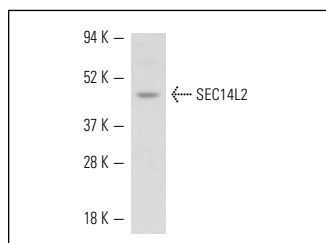
Molecular Weight of SEC14L2: 47 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, rat liver extract: sc-2395 or mouse liver extract: sc-22561.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



SEC14L2 (R-16): sc-32349. Western blot analysis of SEC14L2 expression in rat liver tissue extract.

RESEARCH USE

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

MONOS
Satisfaction
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Try **SEC14L2 (H-4): sc-271905** or **SEC14L2 (H-5): sc-271902**, our highly recommended monoclonal alternatives to SEC14L2 (R-16).