SANTA CRUZ BIOTECHNOLOGY, INC.

SEC14L2 (P-14): sc-32336

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The monomeric, SEC14L2 (SEC14-like protein 2), also known as supernatant protein factor (SPF), α-tocopherol-associated protein or squalene transfer 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 SEC14L2 are expressed in liver, brain, intestine and prostate. Subcellular localization of SEC14L2 is cytoplasmic, but in the presence of α-tocopherol, SEC14L2 localizes in the nucleus. Activity of SEC14L2 depends on posttranslational modifications, specifically phosphorylation by PKA and PKC. SEC14L3 and SEC14L4 both contain one CRAL-TRIO domain and one GOLD domain and may be involved in the transport of hydrophobic ligands.

REFERENCES

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6. 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.
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CHROMOSOMAL LOCATION

Genetic locus: SEC14L2 (human) mapping to 22q12.2; Sec14l2 (mouse) mapping to 11 A1.

SOURCE

SEC14L2 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SEC14L2 of human origin.

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PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32336 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SEC14L2 (P-14) is recommended for detection of SEC14L2 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); may cross-react with SEC14L3 and SEC14L4.

SEC14L2 (P-14) is also recommended for detection of SEC14L2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SEC14L2 siRNA (h): sc-44738, SEC14L2 siRNA (m): sc-44739, SEC14L2 shRNA Plasmid (h): sc-44738-SH, SEC14L2 shRNA Plasmid (m): sc-44739-SH, SEC14L2 shRNA (h) Lentiviral Particles: sc-44738-V and SEC14L2 shRNA (m) Lentiviral Particles: sc-44739-V.

Molecular Weight of SEC14L2: 47 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, rat liver extract: sc-2395 or mouse liver extract: sc-2256.

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.

RESEARCH USE

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

PROTOCOLS

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