SANTA CRUZ BIOTECHNOLOGY, INC.

Rieske FeS (C-19): sc-79036



BACKGROUND

Cytochrome c is a well characterized, mobile electron transport protein that is essential to energy conversion in all aerobic organisms. Cytochrome b associates with cytochrome c subunit 1 and the Rieske protein to form complex III (also designated cytochrome bc1 complex), which is involved in cellular respiration. Ubiquinol cytochrome c reductase (UOCRFS1), also referred to as Rieske iron-sulfur protein (Rieske FeS), represents an important subunit of complex III of the mitochondrial respiratory chain. This complex transfers electrons from ubiquinol to cytochrome c. The gene encoding for Rieske FeS may be involved in the development of a more aggressive phenotype of breast cancer.

REFERENCES

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- Sait, S.N., et al. 2002. Double minute chromosomes in acute myeloid leukemia and myelodysplastic syndrome: identification of new amplification regions by fluorescence *in situ* hybridization and spectral karyotyping. Genes Chromosomes Cancer 34: 42-47.
- Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 191327. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 5. Kaneko, S.J., et al. 2003. CA125 and UQCRFS1 FISH studies of ovarian carcinoma. Gynecol. Oncol. 90: 29-36.
- Ohashi, Y., et al. 2004. Ubiquinol cytochrome c reductase (UQCRFS1) gene amplification in primary breast cancer core biopsy samples. Gynecol. Oncol. 93: 54-58.
- Cheng, X.R., et al. 2007. The effects of Liuwei Dihuang decoction on the gene expression in the hippocampus of senescence-accelerated mouse. Fitoterapia 78: 175-181.

CHROMOSOMAL LOCATION

Genetic locus: UQCRFS1 (human) mapping to 19q12; Uqcrfs1 (mouse) mapping to 13 A3.2.

SOURCE

Rieske FeS (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Rieske FeS of human origin.

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-79036 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rieske FeS (C-19) is recommended for detection of Rieske FeS 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).

Rieske FeS (C-19) is also recommended for detection of Rieske FeS in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rieske FeS siRNA (h): sc-72148, Rieske FeS siRNA (m): sc-72149, Rieske FeS shRNA Plasmid (h): sc-72148-SH, Rieske FeS shRNA Plasmid (m): sc-72149-SH, Rieske FeS shRNA (h) Lentiviral Particles: sc-72148-V and Rieske FeS shRNA (m) Lentiviral Particles: sc-72149-V.

Molecular Weight of Rieske FeS: 30 kDa.

Positive Controls: mouse heart extract: sc-2254, mouse brain extract: sc-2253 or rat heart extract: sc-2393.

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) Immunofluo-rescence: 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.

MONOS Satisfation Guaranteed

Try **Rieske FeS (A-5): sc-271609**, our highly recommended monoclonal alternative to Rieske FeS (C-19).