SANTA CRUZ BIOTECHNOLOGY, INC.

Rieske FeS (H-53): sc-68903

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (UQCRFS1), 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

1. Duncan, A.M., et al. 1994. Assignment of the gene (UQCRFS1) for the Rieske iron-sulfur protein subunit of the mitochondrial cytochrome bc1 complex to the 22q13 and 19q12-q13.1 regions of the human genome. Genomics 21: 281-283.
2. Pennacchio, L.A., et al. 1995. Structure, sequence and location of the UQCRFS1 gene for the human Rieske Fe-S protein. Gene 155: 207-211.

CHROMOSOMAL LOCATION

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

SOURCE

Rieske FeS (H-53) is a rabbit polyclonal antibody raised against amino acids 171-223 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.

APPLICATIONS

Rieske FeS (H-53) 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), immunoprecipitation [1-2 µg per 100-500 µg 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).

Rieske FeS (H-53) 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.

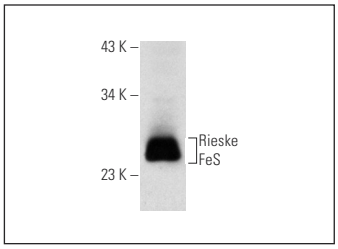
Molecular Weight of Rieske FeS: 30 kDa.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Rieske FeS (H-53): sc-68903. Western blot analysis of Rieske FeS expression in mouse heart tissue extract.

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 Satisfaction Guaranteed

Try **Rieske FeS (A-5): sc-271609**, our highly recommended monoclonal alternative to Rieske FeS (H-53).