# SANTA CRUZ BIOTECHNOLOGY, INC.

# RFESD (G-13): sc-169138



Day Assessed Consider

#### **BACKGROUND**

RFESD, also known as Rieske domain-containing protein, is a 157 amino acid protein that binds one 2Fe-2S cluster per subunit. Involved in metal ion binding, RFESD contains one Rieske domain. The RFESD gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish, and maps to human chromosome 5q15. Chromosome 5 makes up approximately 6% of the human genome and contains 181 million base pairs, which encode 1,000 genes. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is caused by insertions or deletions within the TCOF1 gene and is also associated with chromosome 5. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

# **REFERENCES**

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- Kadmon, M., et al. 2001. Duodenal adenomatosis in familial adenomatous polyposis coli. A review of the literature and results from the Heidelberg Polyposis Register. Int. J. Colorectal Dis. 16: 63-75.
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- 5. Makrantonaki, E., et al. 2007. Molecular mechanisms of skin aging: state of the art. Ann. N.Y. Acad. Sci. 1119: 40-50.
- 6. Herry, A., et al. 2007. Redefining monosomy 5 by molecular cytogenetics in 23 patients with MDS/AML. Eur. J. Haematol. 78: 457-467.
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### **CHROMOSOMAL LOCATION**

Genetic locus: RFESD (human) mapping to 5q15; Rfesd (mouse) mapping to 13  $\,\mathrm{C1}.$ 

#### **SOURCE**

RFESD (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RFESD of human origin.

## **RESEARCH USE**

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

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-169138 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

RFESD (G-13) is recommended for detection of RFESD 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).

RFESD (G-13) is also recommended for detection of RFESD in additional species, including equine and porcine.

Suitable for use as control antibody for RFESD siRNA (h): sc-91829, RFESD siRNA (m): sc-152822, RFESD shRNA Plasmid (h): sc-91829-SH, RFESD shRNA Plasmid (m): sc-152822-SH, RFESD shRNA (h) Lentiviral Particles: sc-91829-V and RFESD shRNA (m) Lentiviral Particles: sc-152822-V.

Molecular Weight of RFESD: 18 kDa.

# **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) 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.

# **PROTOCOLS**

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

**Santa Cruz Biotechnology, Inc.** 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**