SANTA CRUZ BIOTECHNOLOGY, INC.

FREM1 (T-16): sc-82164

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

FREM1 (FRAS1 related extracellular matrix 1), also known as QBRICK or C9orf154, is a 2,179 amino acid protein that contains one C-type lectin domain, one Calx-β domain and 12 CSPG repeats. Localized to the basement membrane of embryonic epidermal cells and secreted into extracellular space, FREM1 functions as an extracellular matrix protein that is essential for epidermal adhesion during embryogenesis and may also participate in epidermal differentiation. FREM1 exists as multiple alternatively spliced isoforms and is encoded by a gene which maps to human chromosome 9. Chromosome 9 contains 145 million base pairs and comprises 4% of the human genome, encoding nearly 900 genes. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

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CHROMOSOMAL LOCATION

Genetic locus: FREM1 (human) mapping to 9p22.3; Frem1 (mouse) mapping to 4 C3.

SOURCE

FREM1 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FREM1 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-82164 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FREM1 (T-16) is recommended for detection of FREM1 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); non cross-reactive with soform FREM1-3 .

FREM1 (T-16) is also recommended for detection of FREM1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for FREM1 siRNA (h): sc-75059, FREM1 siRNA (m): sc-75060, FREM1 shRNA Plasmid (h): sc-75059-SH, FREM1 shRNA Plasmid (m): sc-75060-SH, FREM1 shRNA (h) Lentiviral Particles: sc-75059-V and FREM1 shRNA (m) Lentiviral Particles: sc-75060-V.

Molecular Weight of FREM1: 244 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) 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.