SANTA CRUZ BIOTECHNOLOGY, INC.

C10orf78 (S-13): sc-139225



The Power to Question

BACKGROUND

SFR1 (SWI5-dependent recombination repair 1), also known as MEI5 (meiosis protein 5 homolog), is a 245 amino acid nuclear protein that is widely expressed and belongs to the SFR1/MEI5 family. As a member of the SWI5-SFR1 complex, a complex which is important for double-strand break repair, SFR1 weakly interacts with Rad51. SFR1 exists as three alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 10q25.1. Chromosome 10 contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome. The chromosome 10 encoded gene ERCC6 is important for DNA repair and is linked to Cockayne syndrome which is characterized by extreme photosensitivity and premature aging.

REFERENCES

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- Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. Am. J. Hum. Genet. 81: 756-767.
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CHROMOSOMAL LOCATION

Genetic locus: SFR1 (human) mapping to 10q25.1.

SOURCE

SFR1 (S-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SFR1 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139225 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SFR1 (S-13) is recommended for detection of SFR1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immuno-fluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SFR1 siRNA (h): sc-90421, SFR1 shRNA Plasmid (h): sc-90421-SH and SFR1 shRNA (h) Lentiviral Particles: sc-90421-V.

Molecular Weight of SFR1: 36 kDa.

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) Immunofluo-rescence: 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.

STORAGE

Store at 4° C, **D0 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.