SANTA CRUZ BIOTECHNOLOGY, INC.

SERF1 (R-14): sc-240857

BACKGROUND

SERF1 (small EDRK-rich factor 1), also known as protein 4F5, SMAM1 (SMA modifier 1), SERF1A or SERF1B, is a 110 amino acid protein that exists as two alternatively spliced isoforms, designated isoform short and isoform long. Both SERF1 isoforms are expressed in spinal cord and central nervous system, but only isoform long is found in heart and skeletal muscle. The gene encoding SERF1 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. 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 also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri-du-chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SERF1A and SERF1B (human) mapping to 5q13.2.

SOURCE

SERF1 (R-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SERF1 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-240857 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SERF1 (R-14) is recommended for detection of SERF1 of 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 SERF2.

Suitable for use as control antibody for SERF1 siRNA (h): sc-92056, SERF1 shRNA Plasmid (h): sc-92056-SH and SERF1 shRNA (h) Lentiviral Particles: sc-92056-V.

Molecular Weight of long isoform SERF1: 12 kDa.

Molecular Weight of short isoform SERF1: 7 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.