

SF4 (H-10): sc-514572

BACKGROUND

SF4 (splicing factor 4), also known as RNA-binding protein (RBP) or F23858, is a 645 amino acid nuclear protein and member of the SURP family of splicing factors that is involved in pre-mRNA splicing. Existing as two alternatively spliced isoforms and highly expressed in testis and heart, SF4 is also found in skeletal muscle, brain and kidney where it functions as a component of the spliceosome. SF4 contains two SURP motif repeats, one G patch domain and is encoded by a gene that maps to human chromosome 19p13.11. Chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

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- Trowsdale, J., Barten, R., Haude, A., Stewart, C.A., Beck, S. and Wilson, M.J. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
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CHROMOSOMAL LOCATION

Genetic locus: SUGP1 (human) mapping to 19p13.11; Sugg1 (mouse) mapping to 8 B3.3.

SOURCE

SF4 (H-10) is a mouse monoclonal antibody raised against amino acids 407-571 mapping within an internal region of SF4 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SF4 (H-10) is recommended for detection of SF4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for SF4 siRNA (h): sc-97276, SF4 siRNA (m): sc-153395, SF4 shRNA Plasmid (h): sc-97276-SH, SF4 shRNA Plasmid (m): sc-153395-SH, SF4 shRNA (h) Lentiviral Particles: sc-97276-V and SF4 shRNA (m) Lentiviral Particles: sc-153395-V.

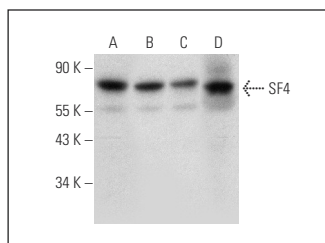
Molecular Weight of SF4: 72 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or SF4 (m): 293T Lysate: sc-123511.

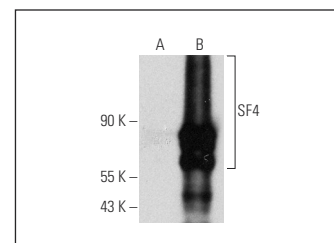
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SF4 (H-10): sc-514572. Western blot analysis of SF4 expression in Hep G2 (A), HeLa (B) and RT-4 (C) and mouse SF4 transfected: sc-123511 (B) 293T whole cell lysates and mouse testis tissue extract (D).



SF4 (H-10): sc-514572. Western blot analysis of SF4 expression in non-transfected: sc-117752 (A) and mouse SF4 transfected: sc-123511 (B) 293T whole cell lysates.

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 for detailed protocols and support products.