

SRF (SRF01 [SR28]): sc-56779

BACKGROUND

Serum response factor (SRF) is a transcription factor that binds the serum response element (SRE), a sequence that mediates the transient response of many cellular genes to growth stimulation. SRF-binding sites are also constitutive promoter elements in many muscle-specific promoters. At the c-Fos SRE, formation of a ternary complex containing SRF and its accessory protein p62TCF appears to be important for signal transduction. Two related Ets domain proteins, Elk-1 and SRF accessory protein-1 (SAP-1), have DNA binding properties identical to that of p62TCF. Elk-1 and SAP-1 contain two homologous regions of which the two amino-terminal regions, the Ets domain (box A) and the B box, mediate ternary complex formation with SRF. The third homologous region, the C box located toward the C-terminus of the proteins, contains conserved consensus phosphorylation sites for MAP kinases.

REFERENCES

1. Norman, C., et al. 1988. Isolation and properties of cDNA clones encoding SRF, a transcription factor that binds to the c-Fos serum response element. *Cell* 55: 989-1003.
2. Boxer, L.M., et al. 1989. The sarcomeric Actin CArG-binding factor is indistinguishable from the c-Fos serum response factor. *Mol. Cell. Biol.* 9: 515-522.
3. Treisman, R. 1990. The SRE: a growth factor responsive transcriptional regulator. *Semin. Cancer Biol.* 1: 47-58.
4. Malik, R.K., et al. 1991. Epidermal growth factor and other mitogens induce binding of a protein complex to the c-Fos serum response element in human astrocytoma and other cells. *J. Biol. Chem.* 266: 8576-8582.
5. Dalton, S. and Treisman, R. 1992. Characterization of SAP-1, a protein recruited by serum response factor to the c-Fos serum response element. *Cell* 68: 597-612.
6. Treisman, R.H., et al. 1992. Spatial flexibility in ternary complex formation by SRF and its accessory proteins. *EMBO J.* 11: 4631-4640.

CHROMOSOMAL LOCATION

Genetic locus: SRF (human) mapping to 6p21.1.

SOURCE

SRF (SRF01 [SR28]) is a mouse monoclonal antibody raised against full length SRF of human origin.

PRODUCT

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

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.

APPLICATIONS

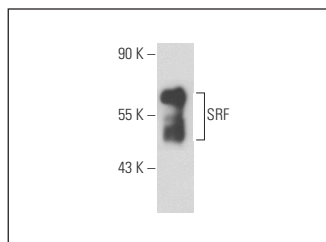
SRF (SRF01 [SR28]) is recommended for detection of SRF of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SRF siRNA (h): sc-36563, SRF shRNA Plasmid (h): sc-36563-SH and SRF shRNA (h) Lentiviral Particles: sc-36563-V.

Molecular Weight of SRF: 40-67 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, K-562 nuclear extract: sc-2130 or Jurkat nuclear extract: sc-2132.

DATA



SRF (SRF01 [SR28]): sc-56779. Western blot analysis of human recombinant SRF.

SELECT PRODUCT CITATIONS

1. Lim, K., et al. 2012. Vascular Klotho deficiency potentiates the development of human artery calcification and mediates resistance to fibroblast growth factor 23. *Circulation* 125: 2243-2255.
2. Lu, T.S., et al. 2012. Induction of intracellular heat-shock protein 72 prevents the development of vascular smooth muscle cell calcification. *Cardiovasc. Res.* 96: 524-532.

PROTOCOLS

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



See **SRF (A-11): sc-25290** for SRF antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.