

SRF (H-300): sc-13029

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.

CHROMOSOMAL LOCATION

Genetic locus: SRF (human) mapping to 6p21.1; Srf (mouse) mapping to 17 C.

SOURCE

SRF (H-300) is a rabbit polyclonal antibody raised against amino acids 209-508 of SRF 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13029 X, 200 µg/0.1 ml.

APPLICATIONS

SRF (H-300) is recommended for detection of SRF of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SRF (H-300) is also recommended for detection of SRF in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for SRF siRNA (h): sc-36563, SRF siRNA (m): sc-36564, SRF shRNA Plasmid (h): sc-36563-SH, SRF shRNA Plasmid (m): sc-36564-SH, SRF shRNA (h) Lentiviral Particles: sc-36563-V and SRF shRNA (m) Lentiviral Particles: sc-36564-V.

SRF (H-300) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SRF: 40-67 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat whole cell lysate: sc-2204 or Jurkat nuclear extract: sc-2132.

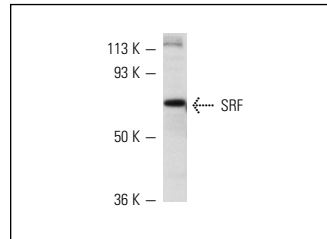
RESEARCH USE

For research use only, not for use in diagnostic procedures.

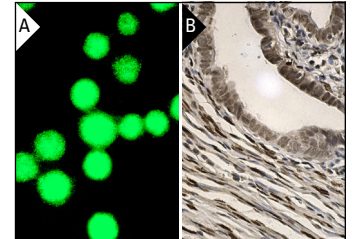
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



SRF (H-300): sc-13029. Western blot analysis of SRF expression in K-562 nuclear extract.



SRF (H-300): sc-13029. Immunofluorescence staining of methanol-fixed K-562 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing nuclear staining of glandular and smooth muscle cells (B).

SELECT PRODUCT CITATIONS

- Rene, C., et al. 2005. Binding of serum response factor to cystic fibrosis transmembrane conductance regulator CArG-like elements, as a new potential CFTR transcriptional regulation pathway. *Nucleic Acids Res.* 33: 5271-5290.
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- Paul, A.P. and Medina, A.E. 2012. Overexpression of serum response factor in astrocytes improves neuronal plasticity in a model of early alcohol exposure. *Neuroscience* 221: 193-202.
- Franco, C.A., et al. 2013. SRF selectively controls tip cell invasive behavior in angiogenesis. *Development* 140: 2321-2333.
- Zhang, S.M., et al. 2014. Interferon regulatory factor 8 modulates phenotypic switching of smooth muscle cells by regulating the activity of myocardin. *Mol. Cell. Biol.* 34: 400-414.


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