SANTA CRUZ BIOTECHNOLOGY, INC.

SAP-1a (C-20): sc-1426

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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: ELK4 (human) mapping to 1q32.1; Elk4 (mouse) mapping to 1 E4.

SOURCE

SAP-1a (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SAP-1a 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-1426 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-1426 X, 200 µg/0.1 ml.s.

APPLICATIONS

SAP-1a (C-20) is recommended for detection of SAP-1a of mouse, rat and 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).

SAP-1a (C-20) is also recommended for detection of SAP-1a in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SAP-1 siRNA (h): sc-77346, SAP-1 siRNA (m): sc-38359, SAP-1 shRNA Plasmid (h): sc-77346-SH, SAP-1 shRNA Plasmid (m): sc-38359-SH, SAP-1 shRNA (h) Lentiviral Particles: sc-77346-V and SAP-1 shRNA (m) Lentiviral Particles: sc-38359-V.

SAP-1a (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SAP-1a: 50 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237 or Jurkat whole cell lysate: sc-2204.

STORAGE

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

SELECT PRODUCT CITATIONS

1. Pandey, P., et al. 1996. Activation of p38 mitogen-activated protein kinase by c-Abl-dependent and -independent mechanisms. J. Biol. Chem. 271: 23775-23779.
2. Akbarali, Y., et al. 1996. Elf-1 Interacts with and transactivates the IgH enhancer p site. J. Biol. Chem. 271: 26007-26012.
3. Clarkson, R.W., et al. 1999. Ternary complex factors Elk-1 and Sap-1a mediate growth hormone-induced transcription of Egr-1 (early growth response factor-1) in 3T3-F442A preadipocytes. Mol. Endocrinol. 13: 619-631.
4. Strobeck, M., et al. 2001. Binding of serum response factor to CArG box sequences is necessary but not sufficient to restrict gene expression to arterial smooth muscle cells. J. Biol. Chem. 276: 16418-16424.
5. Plows, D., et al. 2002. Ecdysone-inducible expression of oncogenic Ha-Ras in NIH 3T3 cells leads to transient nuclear localization of activated extracellular signal-regulated kinase regulated by mitogen-activated protein kinase phosphatase-1. Biochem. J. 362: 305-315.
6. Yamazaki, Y., et al. 2003. Transcriptional regulation of the cytosolic chaperonin θ subunit gene, Cctq, by Ets domain transcription factors Elk-1, Sap-1a, and Net in the absence of serum response factor. J. Biol. Chem. 278: 30642-30651.
7. Xi, H., et al. 2003. Induction of the early growth response gene 1 promoter by TCR agonists and partial agonists: ligand potency is related to sustained phosphorylation of extracellular signal-related kinase substrates. J. Immunol. 170: 315-324.
8. Fernández-Alvarez, A., et al. 2010. Characterization of the human Insulin-induced gene 2 (INSIG2) promoter: the role of Ets-binding motifs. J. Biol. Chem. 285: 11765-11774.

RESEARCH USE

For research use only, not for use in diagnostic procedure

PROTOCOLS

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