SANTA CRUZ BIOTECHNOLOGY, INC.

SAP-1a (H-167): sc-13030



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 (H-167) is a rabbit polyclonal antibody raised against amino acids 154-320 of SAP-1a of human origin.

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13030 X, 200 µg/0.1 ml.

APPLICATIONS

SAP-1a (H-167) is recommended for detection of SAP-1a and SAP-1b 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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 (H-167) 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.

RESEARCH USE

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

DATA



SAP-1a (H-167): sc-13030. Western blot analysis of SAP-1a expression in SK-N-MC whole cell lysate

SELECT PRODUCT CITATIONS

- 1. Adiseshaiah, P., et al. 2005. Mitogen regulated induction of Fra-1 protooncogene is controlled by the transcription factors binding to both serum and TPA response elements. Oncogene 24: 4193-4205.
- 2. Willoughby, J.E., et al. 2007. Raf signaling but not the ERK effector SAP-1 is required for regulatory T cell development. J. Immunol. 179: 6836-6844.
- 3. Cooper, S.J., et al. 2007. Serum response factor binding sites differ in three human cell types. Genome Res. 17: 136-144.
- 4. Hasan, R.N., et al. 2008. Hemin upregulates Egr-1 expression in vascular smooth muscle cells via reactive oxygen species ERK 1/2-Elk-1 and NFKB. Circ. Res. 102: 42-50.
- 5. Fernández-Alvarez, A., et al. 2010. Characterization of the human Insulininduced gene 2 (INSIG2) promoter: the role of Ets-binding motifs. J. Biol. Chem. 285: 11765-11774.
- 6. Kaikkonen, S., et al. 2010. SUMOylation can regulate the activity of ETS-like transcription factor 4. Biochim. Biophys. Acta 1799: 555-560.
- 7. O'Geen, H., et al. 2010. Genome-wide binding of the orphan nuclear receptor TR4 suggests its general role in fundamental biological processes. BMC Genomics 11: 689.
- 8. Costello, P., et al. 2010. Ternary complex factors SAP-1 and Elk-1, but not net, are functionally equivalent in thymocyte development. J. Immunol. 185: 1082-1092.
- 9. lyengar, S., et al. 2011. Functional analysis of KAP1 genomic recruitment. Mol. Cell. Biol. 31: 1833-1847.

MONOS Try SAP-1a (H-3): sc-166823, our highly recommended monoclonal alternative to SAP-1a (H-167).

Satisfation

Guaranteed