SANTA CRUZ BIOTECHNOLOGY, INC.

Elk-1 (E-5): sc-365876

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Ets-1 is the prototype member of a family of genes identified on the basis of homology to the v-Ets oncogene isolated from the E26 erythroblastosis virus. This family of genes currently includes Ets-1, Ets-2, Erg-1–3, Elk-1, Elf-1, Elf-5, NERF, PU.1, PEA3, ERM, FEV, ER81, Fli-1, TEL, Spi-B, ESE-1, ESE-3A, Net, ABT1 and ERF. Members of the Ets gene family exhibit varied patterns of tissue expression, and share a highly conserved carboxy-terminal domain containing a sequence related to the SV40 large T antigen nuclear localization signal sequence. This conserved domain is essential for Ets-1 binding to DNA and is likely to be responsible for the DNA binding activity of all members of the Ets gene family. Several of these proteins have been shown to recognize similar motifs in DNA that share a centrally located 5'-GGAA-3' element.

CHROMOSOMAL LOCATION

Genetic locus: ELK1 (human) mapping to Xp11.23; Elk1 (mouse) mapping to X A1.3.

SOURCE

Elk-1 (E-5) is a mouse monoclonal antibody raised against amino acids 161-320 mapping within an internal region of Elk-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain 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-365876 X, 200 µg/0.1 ml.

Elk-1 (E-5) is available conjugated to agarose (sc-365876 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365876 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365876 PE), fluorescein (sc-365876 FITC), Alexa Fluor® 488 (sc-365876 AF488), Alexa Fluor® 546 (sc-365876 AF546), Alexa Fluor® 594 (sc-365876 AF594) or Alexa Fluor® 647 (sc-365876 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365876 AF680) or Alexa Fluor® 790 (sc-365876 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

Elk-1 (E-5) is recommended for detection of Elk-1 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), 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).

Suitable for use as control antibody for Elk-1 siRNA (h): sc-35290, Elk-1 siRNA (m): sc-35291, Elk-1 shRNA Plasmid (h): sc-35290-SH, Elk-1 shRNA Plasmid (m): sc-35291-SH, Elk-1 shRNA (h) Lentiviral Particles: sc-35290-V and Elk-1 shRNA (m) Lentiviral Particles: sc-35291-V.

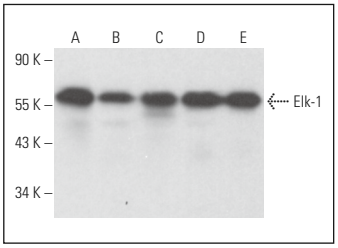
Elk-1 (E-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Elk-1: 62 kDa.

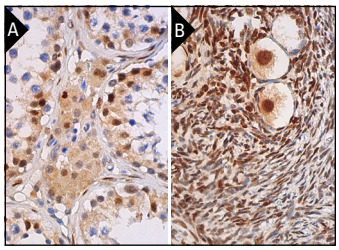
STORAGE

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

DATA



Elk-1 (E-5): sc-365876. Western blot analysis of Elk-1 expression in HeLa (**A**), COLO 205 (**B**), SW480 (**C**), HEL 92.1.7 (**D**) and MCF7 (**E**) whole cell lysates.



Elk-1 (E-5): sc-365876. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts and Leydig cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing nuclear staining of follicle cells, ovarian stroma cells and oocytes (**B**).

SELECT PRODUCT CITATIONS

1. Vivacqua, A., et al. 2015. Estrogenic gper signaling regulates mir144 expression in cancer cells and cancer-associated fibroblasts. Oncotarget 6: 16573-16587.
2. Bencheikh, L., et al. 2019. Dynamic gene regulation by nuclear colony-stimulating factor 1 receptor in human monocytes and macrophages. Nat. Commun. 10: 1935.
3. Makino, E., et al. 2020. Targeting Rad51 as a strategy for the treatment of melanoma cells resistant to MAPK pathway inhibition. Cell Death Dis. 11: 581.
4. Chaturvedi, A., et al. 2021. Synergistic activity of IDH1 inhibitor BAY1436032 with azacitidine in IDH1 mutant acute myeloid leukemia. Haematologica 106: 565-573.
5. Ma, J., et al. 2021. c-KIT-ERK1/2 signaling activated ELK1 and upregulated carcinoembryonic antigen expression to promote colorectal cancer progression. Cancer Sci. 112: 655-667.
6. Sadeghi, M.A., et al. 2021. Chronically altered NMDAR signaling in epilepsy mediates comorbid depression. Acta Neuropathol. Commun. 9: 53.
7. Wang, X., et al. 2021. DDB1 binds histone reader BRWD3 to activate the transcriptional cascade in adipogenesis and promote onset of obesity. Cell Rep. 35: 109281.
8. Dedoni, S., et al. 2021. The neurotrophin receptor TrkC as a novel molecular target of the antineuroblastoma action of valproic acid. Int. J. Mol. Sci. 22: 7790.
9. Tooley, J.G., et al. 2021. CREB-mediated transcriptional activation of NRMT1 drives muscle differentiation. Transcription 12: 72-88.

RESEARCH USE

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