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 responsible for the DNA binding activity of all members of the Ets gene family. ELK-1 is a 428 amino acid nuclear protein belonging to the Ets family. Expressed in lung and testis, ELK-1 stimulates transcription and binds to purine-rich DNA sequences. Upon mitogenic stimulation, ELK-1 is phosphorylated on C-terminal serine and threonine residues by MAPK1 (mitogen-activated protein kinase 1). Phosphorylation of ELK-1 leads to loss of SUMOylation and restores transcriptional activator activity. SUMOylation of ELK-1 results in recruitment of HDAC2 to target gene promoters, which leads to decreased histone acetylation and reduced transactivator activity.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

p-Elk-1 (B-4) is a mouse monoclonal antibody raised against a sequence containing Ser383 phosphorylated Elk-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG 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-8406 X, 200 µg/0.1 ml.

p-Elk-1 (B-4) is available conjugated to agarose (sc-8406 AC, 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8406 HRP), 200 µg/ml, for WB, IHC(PE) and ELISA; and to either phycoerythrin (sc-8406 PE), fluorescein (sc-8406 FITC), Alexa Fluor® 488 (sc-8406 AF488) or Alexa Fluor® 647 (sc-8406 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-8406 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

p-Elk-1 (B-4) is recommended for detection of Ser383 phosphorylated Elk-1 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).

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.

p-Elk-1 (B-4) X TransCruz antibody is recommended for Gel Supershift and ChiP applications.

Molecular Weight of p-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.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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