

BACKGROUND

Elk1 is a member of ETS-domain transcription factor family. ETS proteins form one of the largest families of signal-dependent transcriptional regulators, mediating cellular proliferation, differentiation and tumorigenesis¹. Elk-1 is regulated by phosphorylation in response to activation of the MAPK (mitogen-activated protein kinase) pathways. This phosphorylation triggers a series of molecular events that convert Elk-1 from a transcriptionally silent state into a highly active state and then back to a basal level². At the same time, activation of the ERK (extracellular-signal-regulated kinase) MAPK pathway leads to loss of modification of Elk-1 by SUMO (small ubiquitin-related modifier). As SUMO imparts repressive properties on Elk-1, ERK-mediated SUMO loss leads to de-repression at the same time as the ERK pathway promotes activation of Elk-13. Thus a two-step mechanism is employed to convert Elk-1 into its fully activated state.

References:

1. Tsu, T. et al.: J. Cell. Biochem. 91:896, 2004.
2. Yang, S. H. & Sharrocks, A. D.: Biochem. Soc. Symp. 73:121, 2006.
3. Yang, S. H. et al.: Mol. Cell 12:63, 2003.

TECHNICAL INFORMATION

Source:

Anti-Elk1 is a Mouse Monoclonal Antibody raised against *E. coli*-expressed recombinant human Elk1 protein.

Specificity and Sensitivity:

Anti-Elk1 specifically detects Elk1 protein and does not cross-react with related proteins.

Storage Buffer: 0.1 M PBS (pH 7.2), 0.1% glycine, 0.1% sodium azide, 0.1% BSA, 50% glycerol.

Storage:

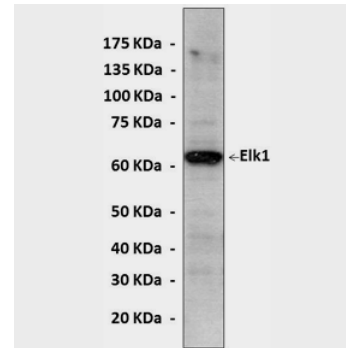
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC	n/d
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Western blot detection of Elk1 protein K562 cell lysate using Elk1 Antibody.

