

DESCRIPTION

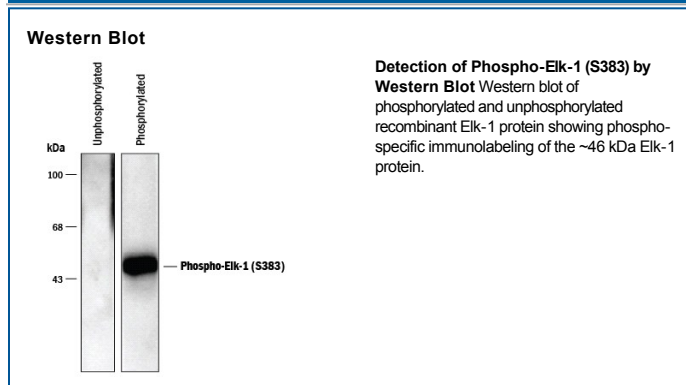
| | |
|---------------------------|---|
| Species Reactivity | Human/Mouse/Rat/Canine/Primate/Zebrafish |
| Specificity | Human, mouse and rat ~46 kDa Elk-1 protein phosphorylated at S383 |
| Source | Polyclonal Rabbit IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Phosphopeptide corresponding to amino acid residues surrounding the phospho-S383 of Elk-1 |
| Formulation | 100 µL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA and 50% glycerol. See Certificate of Analysis for details. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---------------------|----------------------------------|---------------|
| Western Blot | 1:1000 dilution | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|---|
| Shipping | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | For long-term storage, ≤ -20° C is recommended. Product is stable at ≤ -20° C for at least 1 year. |

BACKGROUND

Elk-1 (ETS-like protein 1) is a 45 kDa member of the ETS family of serum response element-binding transcription factors. It is 428 amino acids (aa) in length and contains an N-terminal ETS DNA-binding domain (aa 3 - 86), a serum response factor (SRF) binding segment (B box) (aa 148 - 168), a MAPK docking site (D domain) (aa 310 - 334), and a C-terminal transactivation domain (C domain) (aa 336 - 428). Elk-1 is normally SUMOylated on R230, R249 and R254. This interferes with nuclear localization and activation. It is also bound to p300 in an inactive complex. Phosphorylation by MAPK1 at S383 and S389 removes SUMO protein, allowing for nuclear localization, and activation of the pre-existing p300/Elk-1 complex that is capable of rapidly initiating gene transcription.

References:

1. Yang, S-H. et al. (2003) Mol. Cell 12:63.
2. Rao, V.N. et al. (1989) Science 244:66.
3. Li, Q-J. et al. (2003) EMBO J. 22:281.
4. Salinas, S. et al. (2004) J. Cell Biol. 165:767.