



## ELK1 Mouse Monoclonal Antibody

E10-20101

**Background:** The transcription factor ELK1 is a family member of the ETS oncogene family and of the ternary complex factor (TCF) subfamily, which is located on chromosome Xp11.2 and stimulates transcription. It binds to purine-rich DNA sequences. Proteins of the TCF subfamily form a ternary complex by binding to the serum response factor and the serum response element in the promoter of the c-fos proto-oncogene. The protein encoded by this gene is a nuclear target for the ras-raf-MAPK signaling cascade. Elk1 is phosphorylated by MAP kinase pathways at a cluster of S/T motifs at its C terminus. It appears to be a direct target of activated MAP kinase. Biochemical studies indicate that Elk1 is a good substrate for MAP kinase; the kinetics of Elk1 phosphorylation and activation correlate with MAP kinase activity, and interfering mutants of MAP kinase block Elk1 activation *in vivo*. More recent studies have shown that Elk1 is also a target of the Stress Activated Kinase SAPK/JNK. Phosphorylation of Elk1 has also been implicated in synaptic plasticity in the adult hippocampus.

**Catalog Number:** E10-20101

**Amount:** 100 µg/100 µl

**Clone Number:** 3H6D12, 4H9C8, 4H9F1

**Species:** Mouse IgG1

**Aliases:** ELK1

**Entrez Gene:** 2002

**Immunogen:** Purified recombinant fragment of ELK1 expressed in *E. coli*.

**Storage:** Store at 4°C, for long term storage, store at -20°C

**Formulation:** Ascitic fluid containing 0.03% sodium azide.

**Species Reactivities:** Human

**Tested Applications:** WB, IHC, ELISA. Not yet tested in other applications. Determining optimal working dilutions by titration test.

**Application notes:** WB: 1/500 - 1/2000, IHC: 1/200 - 1/1000, ELISA. Propose dilution 1/10000.

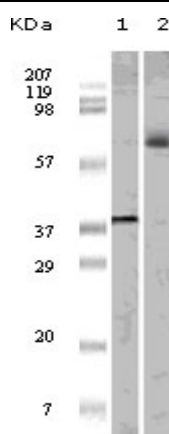


Figure 1. Western blot analysis using ELK1 mouse mAb against truncated ELK1 recombinant protein (1) and K562 cell lysate (2).

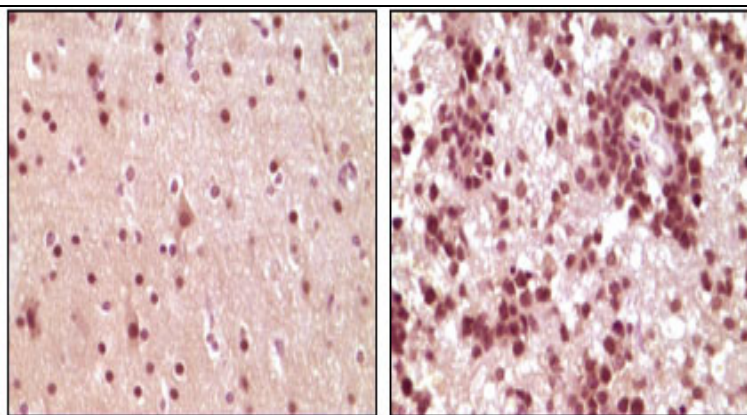


Figure 2. Immunohistochemical analysis of paraffin-embedded human brain tumor tissue, showing nuclear and cytoplasmic localization using ELK1 mouse mAb with DAB staining.

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