

Monoclonal Antibody to ELK1

Cat. #: Mab-606121

Description:

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.

Immunogen/Specificity:

Ni-NTA purified truncated recombinant ELK1 expressed in E. Coli strain BL21 (DE3).

Applications :

Western Blot: 1: 500- 1: 1,000

IHC(P): 1: 500- 1: 1,000

ELISA: Proposed dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Ascites

Reference:

1. Rao, V.N., et al. 1989. *Science*. 244 (4900):66-70
2. Hsieh, Y.H., et al. 2006. *Biochem. Biophys. Res. Commun.* 339 (1): 217-225
3. Gille, H., Strahl, T. and Shaw, P.E. 1995. *Curr. Biol.* 5 (10): 1191-1200
4. Gille, H., et al. 1995. *EMBO J.* 14 (5): 951-962

Clone Number: 3H6D12, 4H9C8, 4H9F1

Isotype: IgG1

Species: Human

Storage and Stability: stored at -20 C

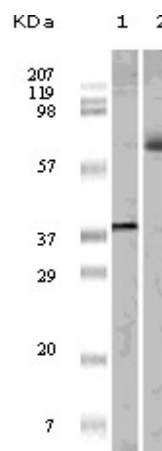
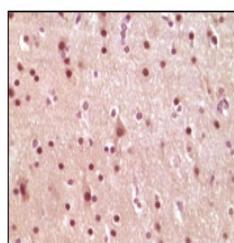
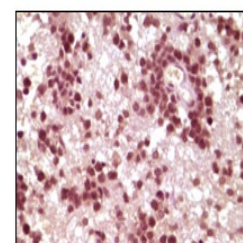


Figure 1: Western blot analysis using anti-Human Elk-1 monoclonal antibody against truncated recombinant Elk-1 (lane 1) and K562 cell lysate (lane 2).



Human brain tumor tissue



Human brain tumor tissue

Figure 2: Immunohistochemical analysis of paraffin-embedded human brain tumor tissue showing nuclear/cytoplasmic localization using ELK-1 with DAB staining.