

Monoclonal Antibody to ELK1

Cat. #: Mab-606122

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

ELISA: Proposed dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Antibodies are purified by protein A affinity chromatography.

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: 7E10D5, 7E10E8

Isotype: IgG1

Species: Human

Storage and Stability: stored at -20 C

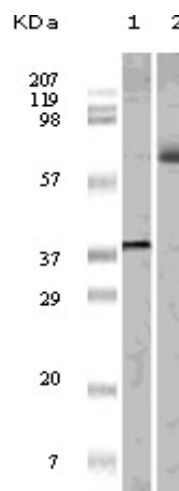


Figure 1: Western blot analysis using anti-human ELK-1 monoclonal antibody against truncated recombinant ELK-1 (lane 1) and K562 cell lysate (lane 2).