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ELK1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1079a

Product Information

Application	WB, IHC, E
Primary Accession	P19419
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3H6D12; 4H9C8; 4H9F1
Isotype	IgG1
Calculated MW	44888
Description	The transcription factor ELK1 is a family of member of ETS oncogene family and of the ternary complex factor (TCF) subfamily,which is located on chromosome Xp11.2 and stimulates transcription. binds to purine-rich DNA sequences. Proteins of the TCF subfamily form a ternary complex by binding to the the serum response factor and the serum reponse 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 Elk1phosphorylation 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	Purified recombinant fragment of ELK1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	2002
Other Names	ETS domain-containing protein Elk-1, ELK1
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ELK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ELK1 (HGNC:3321)
Function	Transcription factor that binds to purine-rich DNA sequences (PubMed:10799319, PubMed:7889942). Forms a ternary complex with SRF and the ETS and SRF motifs of the serum response element (SRE) on the promoter region of immediate early genes such as FOS and IER2 (PubMed:1630903). Induces target gene transcription upon JNK and MAPK-signaling pathways stimulation (PubMed:7889942).
Cellular Location	Nucleus.
Tissue Location	Lung and testis.

References

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.

Images

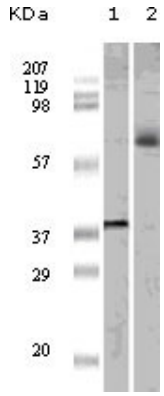

Figure 1: Western blot analysis using ELK1 mouse mAb against truncated ELK1 recombinant protein (1) and K562 cell lysate (2).

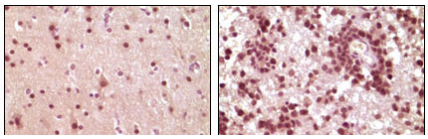

Figure 2: Immunohistochemical analysis of paraffin-embedded human brain tumor tissue, showing nuclear and cytoplasmic localization using ELK1 mouse mAb with DAB staining.