

ELK1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1079a**Specification**

ELK1 Antibody - Product Information

Application	WB, IHC, E
Primary Accession	P19419
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

Description

The transcription factor ELK1 is a family member of 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

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

Formulation

Ascitic fluid containing 0.03% sodium azide.

ELK1 Antibody - 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.

ELK1 Antibody - 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.

ELK1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ELK1 Antibody - Images

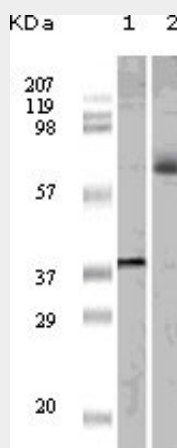


Figure 1: Western blot analysis using ELK1 mouse mAb against truncated ELK1 recombinant

protein (1) and K562 cell lysate (2).

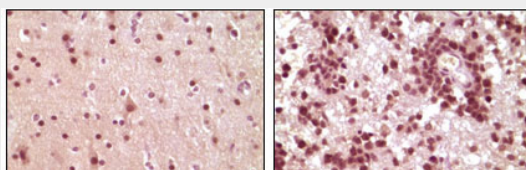


Figure 2: Immunohistochemical analysis of paraffin-embedded human brain tumor tissue, showing nuclear and cytoplasmic localization using ELK1 mouse mAb with DAB staining.

ELK1 Antibody - 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.