10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 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.

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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 Cytomety
- Cell Culture

ELK1 Antibody - Images

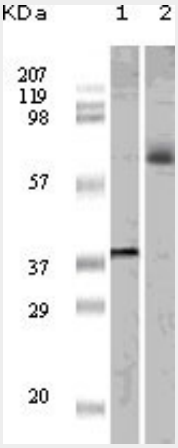

Figure 1: Western blot analysis using ELK1 mouse mAb against truncated ELK1 recombinant

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

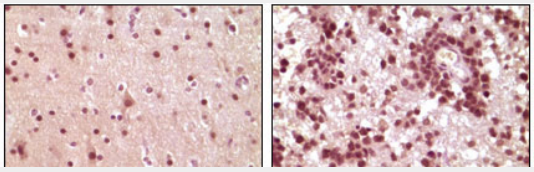

Figure 2: Immunohistochemical analysis of paraffin-embedded human brain tumor tissue, showing nuclear and cytoplasmic localization using ELK1 mouse mAb with DAB staining.

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.