

## Product datasheet

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# ARG51508 anti-ELK1 phospho (Ser383) antibody

Package: 100 μl, 50 μl Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes ELK1 phospho (Ser383)

Tested Reactivity Hu, Ms, Rat
Tested Application IHC-P, WB
Host Rabbit
Clonality Polyclonal

Isotype IgG
Target Name ELK1

Species Human

Immunogen Peptide sequence around phosphorylation site of serine 383 (T-L-S(p)-P-I) derived from Human Elk-1.

Conjugation Un-conjugated

Alternate Names ETS domain-containing protein Elk-1

#### **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form

Purification Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopep
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Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatogramphy using non-

phosphopeptide.

Liquid

Buffer PBS (without Mg2+ and Ca2+, pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links <u>GeneID: 13712 Mouse</u>

GeneID: 2002 Human

Swiss-port # P19419 Human

Swiss-port # P41969 Mouse

Gene Symbol ELK1

Gene Full Name ELK1, member of ETS oncogene family

Background Elk-1 is a member of the Ets family of transcription factors and of the ternary complex factor (TCF)

subfamily. 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. Iternatively spliced

transcript variants encoding the same protein have been found for this gene.

**Function** Stimulates transcription. Binds to purine-rich DNA sequences. Can form a ternary complex with the

serum response factor and the ETS and SRF motifs of the fos serum response element. [UniProt]

Research Area Cancer antibody; Gene Regulation antibody; Signaling Transduction antibody

Calculated Mw 45 kDa

PTM Sumoylation represses transcriptional activator activity as it results in recruitment of HDAC2 to target

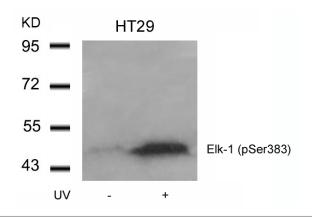
gene promoters which leads to decreased histone acetylation and reduced transactivator activity. It

also regulates nuclear retention.

On mitogenic stimulation, phosphorylated on C-terminal serine and threonine residues by MAPK1. Ser-383 and Ser-389 are the preferred sites for MAPK1. In vitro, phosphorylation by MAPK1 potentiates ternary complex formation with the serum responses factors, SRE and SRF. Also phosphorylated on Ser-383 by MAPK8 and/or MAKP9. Phosphorylation leads to loss of sumoylation and restores transcriptional activator activity. Phosphorylated and activated by CAMK4, MAPK11, MAPK12 and

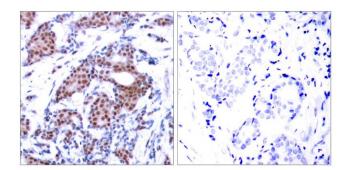
MAPK14. Upon bFGF stimulus, phosphorylated by PAK1 (By similarity).

#### **Images**



#### ARG51508 anti-ELK1 phospho (Ser383) antibody WB image

Western blot: Extracts from HT29 cells untreated or treated with UV stained with ARG51508 anti-ELK1 phospho (Ser383) antibody.



### ARG51508 anti-ELK1 phospho (Ser383) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51508 anti-ELK1 phospho (Ser383) antibody (left) or the same antibody preincubated with blocking peptide (right).