

Product datasheet

Anti-ELK1 antibody [EPR1913(2)] ab188316

KO VALIDATED Recombinant RabMAB

★★★★★ [1 Abreviews](#) [2 References](#) [5 Images](#)

Overview

Product name	Anti-ELK1 antibody [EPR1913(2)]
Description	Rabbit monoclonal [EPR1913(2)] to ELK1
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa and K562 cell lysate. ICC: HeLa cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1913(2)
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab188316 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000. Predicted molecular weight: 45 kDa.
ICC/IF		1/100.

Target

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.

Tissue specificity

Lung and testis.

Sequence similarities

Belongs to the ETS family.
Contains 1 ETS DNA-binding domain.

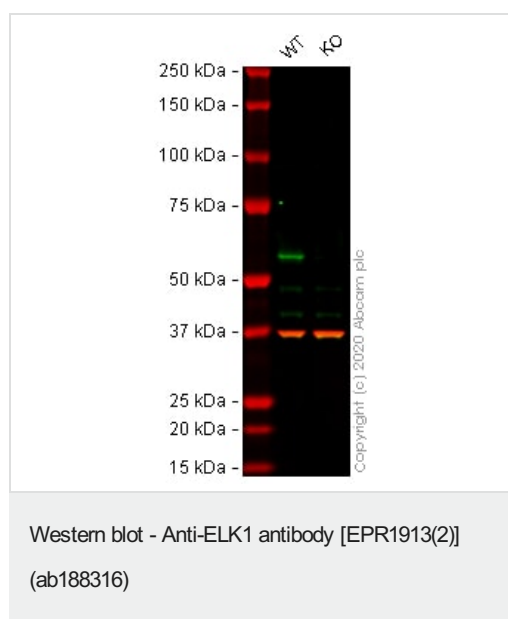
Post-translational modifications

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. Phosphorylation leads to loss of sumoylation and restores transcriptional activator activity.

Cellular localization

Nucleus.

Images



All lanes : Anti-ELK1 antibody [EPR1913(2)] (ab188316) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : ELK1 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

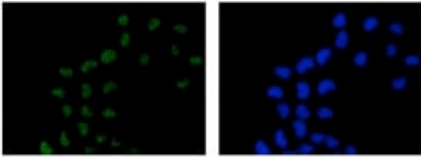
Predicted band size: 45 kDa

Observed band size: 55 kDa

Lanes 1-2: Merged signal (red and green). Green - ab188316

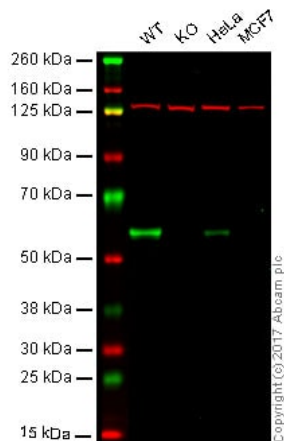
observed at 55 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

ab188316 was shown to react with ELK1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab261764](#) (knockout cell lysate [ab256904](#)) was used. Wild-type HeLa and ELK1 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab188316 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-ELK1 antibody [EPR1913(2)] ([ab188316](#))

Immunocytochemical analysis of HeLa cells fixed in 2% paraformaldehyde labeling ELK1 with ab188316 at 1/100 dilution and Goat anti rabbit IgG(Alexa Fluor® 488) at 1/200 dilution. Counterstained with DAPI (blue).



Western blot - Anti-ELK1 antibody [EPR1913(2)] ([ab188316](#))

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

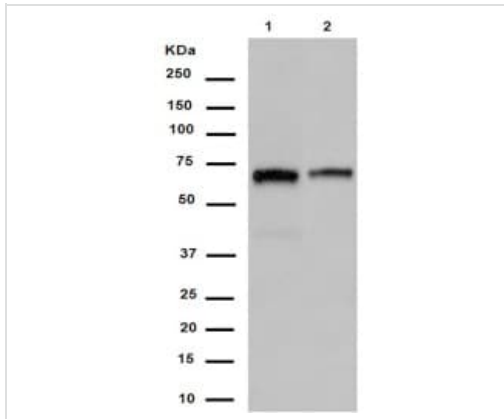
Lane 2: ELK1 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa positive whole cell lysate (20 µg)

Lane 4: MCF7 negative whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab188316 observed at 55 kDa. Red - loading control, [ab18058](#), observed at 130 kDa.

ab188316 was shown to specifically react with ELK1 in wild-type HAP1 cells as signal was lost in ELK1 knockout cells. Wild-type and ELK1 knockout samples were subjected to SDS-PAGE. Ab188316 and [ab18058](#) (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-ELK1 antibody [EPR1913(2)] (ab188316)

All lanes : Anti-ELK1 antibody [EPR1913(2)] (ab188316) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : K562 cell lysate





Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 45 kDa

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-ELK1 antibody [EPR1913(2)] (ab188316)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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