

PRODUCT INFORMATION

Product name : ELK3 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to ELK3

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : ELK3

Gene Name : ELK3, ETS-domain protein (SRF accessory protein 2)

Ensembl ID : ENSG00000111145

Entrez Gene ID : 2004

GenBank Accession number : BC017371

Swiss-Prot : P41970

Molecular weight of ELK3 : 44.2 kDa

Function : May be a negative regulator of transcription, but can activate transcription when coexpressed with Ras, Src or Mos. Forms a ternary complex with the serum response factor and the ETS and SRF motifs of the Fos serum response element.

Expected subcellular localization : Nucleus.

Summary: The protein encoded by this gene is a member of the ETS-domain transcription factor family and the ternary complex factor (TCF) subfamily. Proteins in this subfamily regulate transcription when recruited by serum response factor to bind to serum response elements. This protein is activated by signal-induced phosphorylation; studies in rodents suggest that it is a transcriptional inhibitor in the absence of Ras, but activates transcription when Ras is present.

APPLICATION NOTE

Recommended dilution :

- ELISA: Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/20000 has been determined. Appropriate specificity controls were run.
- WB (recombinant protein): 1/5000.
- WB (cell lysate): 1/250.
- IF: 1/500.

Optimal dilutions/concentration should be determined by the end user.

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Purified Antibody

Storage buffer : 0.5 X PBS, containing a final concentration of 50% glycerol, 0.1% BSA and 0.01% Thimerosal.

Form : Liquid

Storage instruction : Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

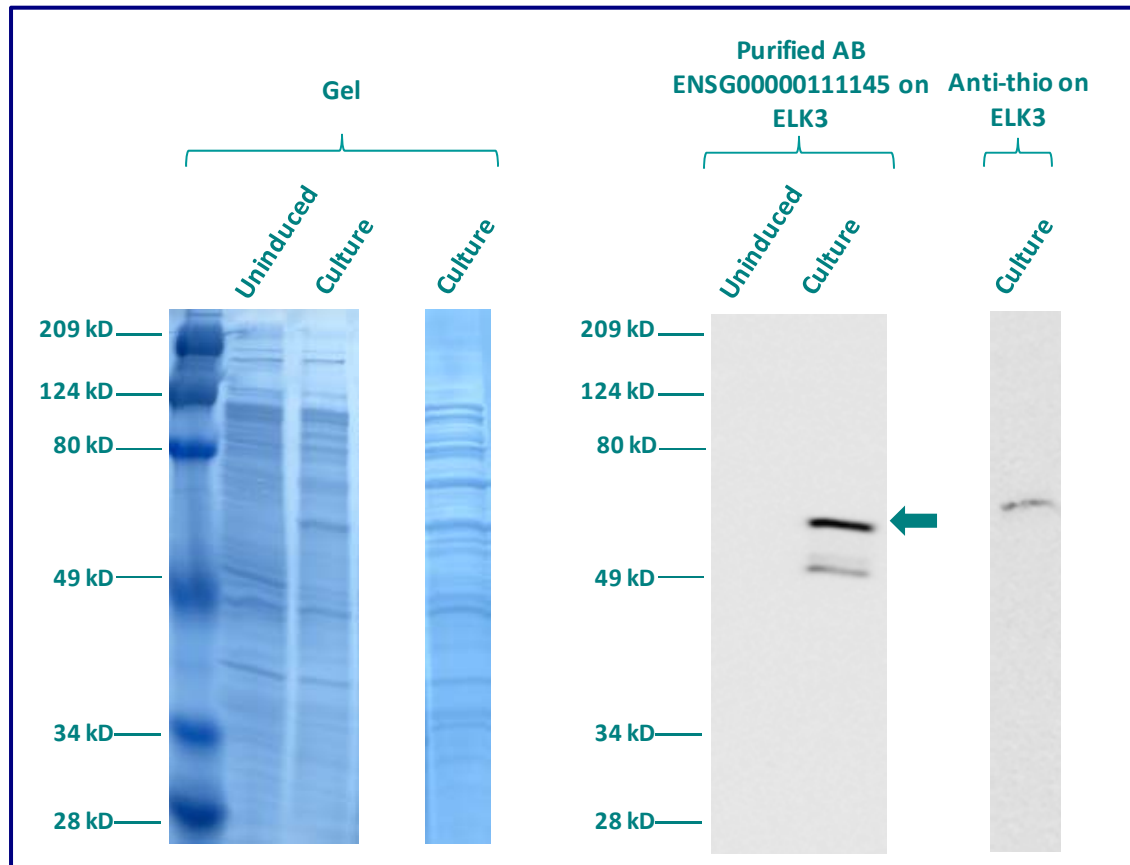
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000111145 has been tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

An anti-thio (positive control) has been tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells) as a positive control.

Plasmid name : pBAD-DEST49.

Molecular weight of ELK3 : 58.2kDa (44.2kDa + another 14kDa for the tag).



Gel concentration: 10%

Blocking: in 5% non-fat milk-PBST solution

1st Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000111145 at 1:5000
- Dilute the anti-thio at 1:5000

60 minutes of incubation

2nd Antibody: The antibody is diluted in blocking buffer.

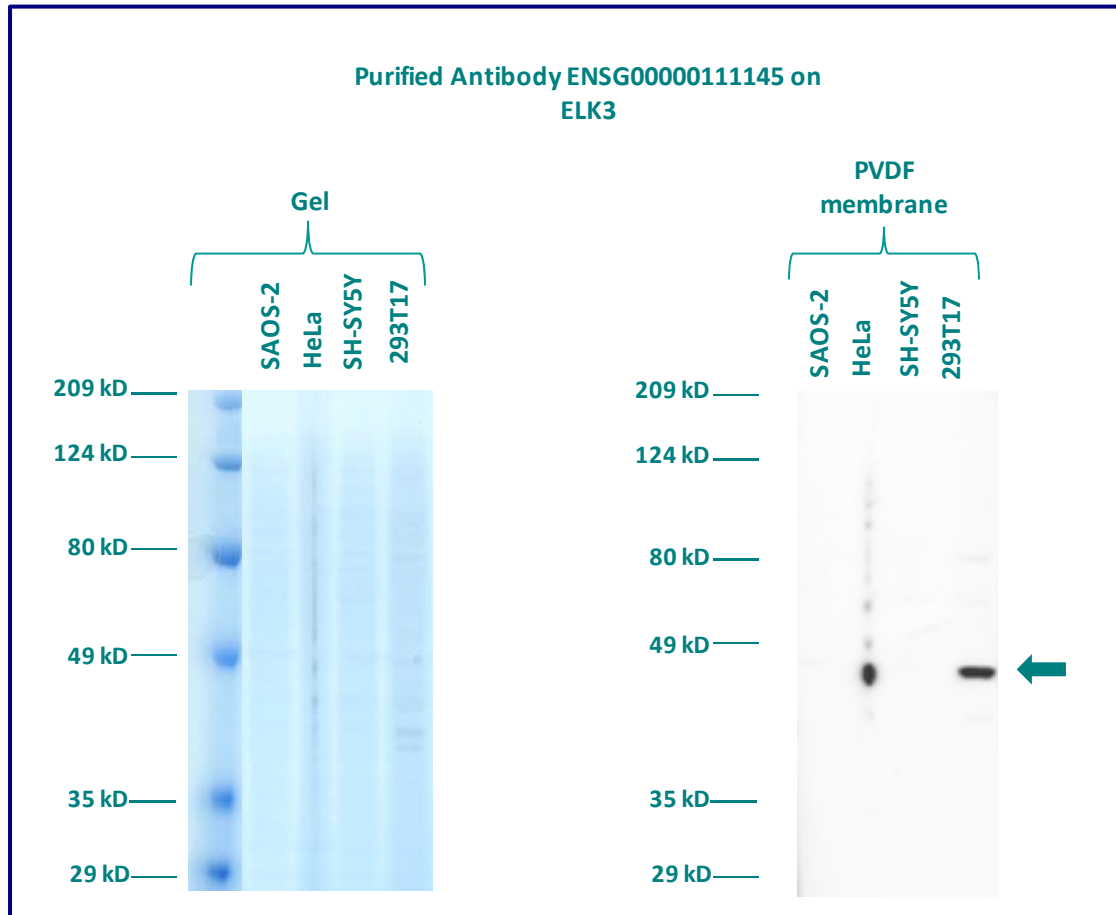
- Dilute the anti-Rabbit IgG HRP conjugated at 1/10000

60 minutes of incubation

WESTERN BLOT ON CELL LYSATE

The purified antibody ENSG00000111145 has been tested at a concentration of 1/250 on total protein extract of various cell lines (SAOS 2, HeLa, SH-SY5Y & 293T17).

Molecular weight of ELK3 : 44.2kDa



Gel concentration: 10%

Blocking: in 5% non-fat milk-PBST solution

1st Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000111145 at 1:2500
- 60 minutes of incubation

2nd Antibody: The antibody is diluted in blocking buffer.

- Dilute the anti-Rabbit IgG HRP conjugated at 1/10000
- 60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

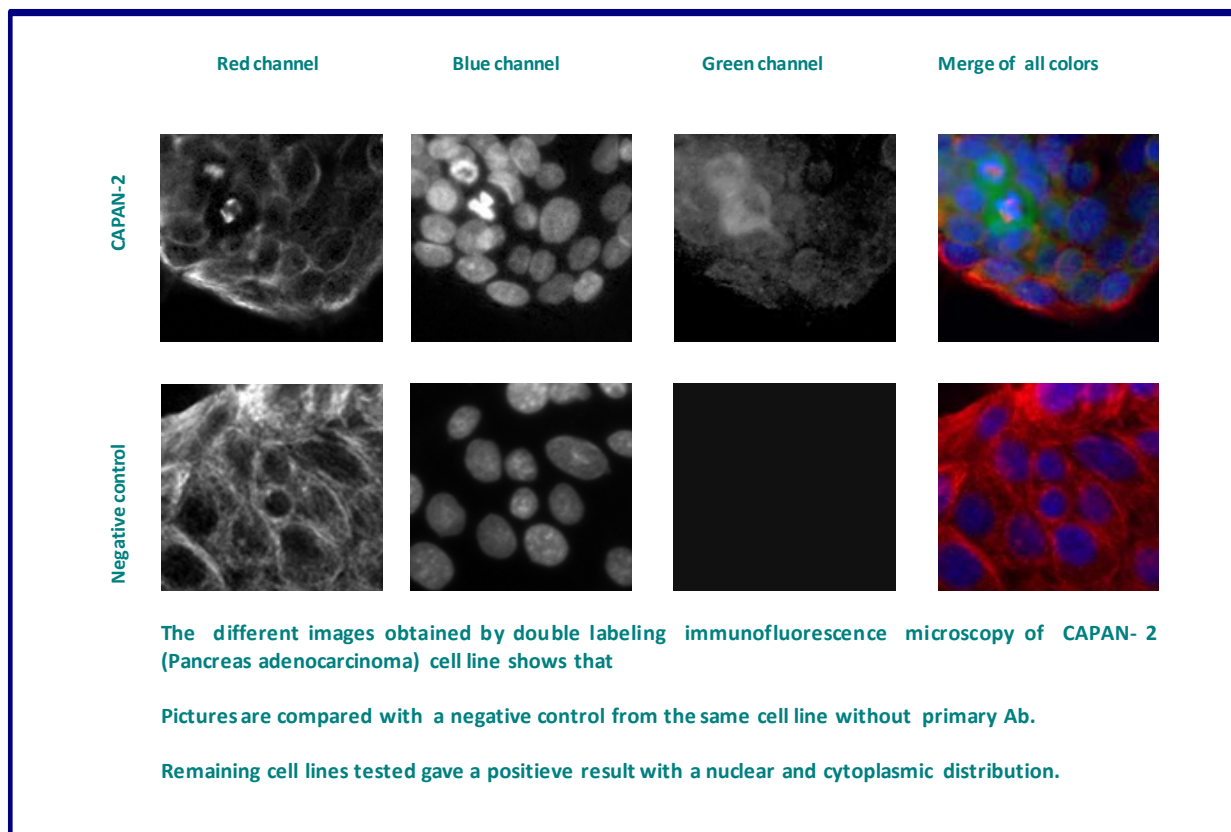
Immunofluorescence analysis of ETS domain-containing protein Elk-3 (ELK3) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The purified Antibody ENSG00000111145 has been tested at 1/500.

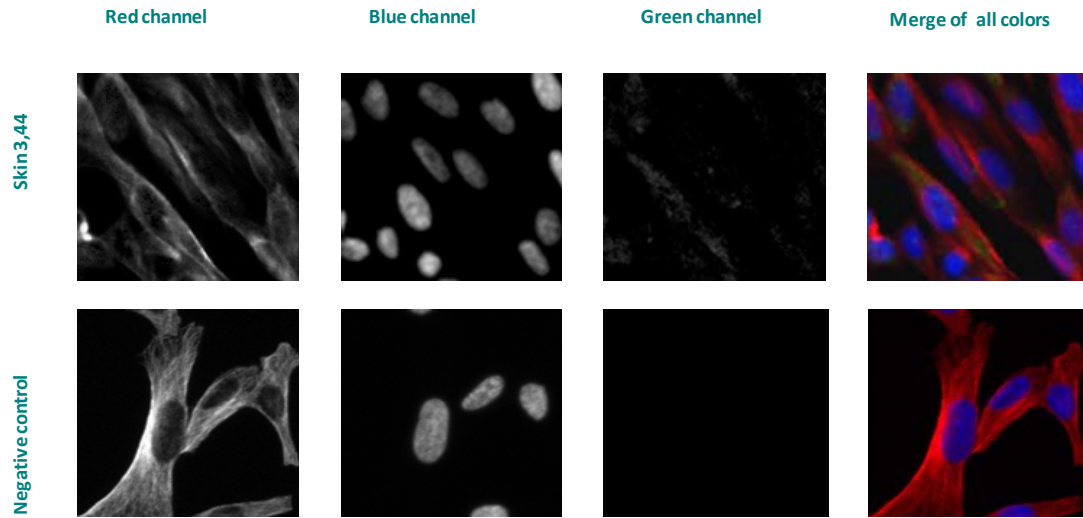
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- ELK3 antibody (purified)

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that ELK3 is a cytoplasmic protein detected in this cellular tissue.

Pictures are compared with a negative control from the same cell line without primary Ab.