

PRODUCT INFORMATION

Product name : USF2 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to USF2

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : USF2

Gene Name : upstream transcription factor 2, c-fos interacting

Ensembl ID : ENSG00000105698

Entrez GeneID : 7392

GenBank Accession number : AY007087

Omim ID : 600390

Swiss-Prot : Q15853

Molecular weight of USF2 : 36.9kDa

Function : Transcription factor that binds to a symmetrical DNA sequence (E-boxes) (5'-CACGTG-3') that is found in a variety of viral and cellular promoters

Expected subcellular localization : Nucleus

Summary : This gene encodes a member of the basic helix-loop-helix leucine zipper family, and can function as a cellular transcription factor. The encoded protein can activate transcription through pyrimidine-rich initiator (Inr) elements and E-box motifs. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/25000 is determined. Appropriate specificity controls were run.
- **WB:** 1/500.
- **IF:** 1/100.

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

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Crude serum, Final bleed

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

Form : Liquid

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

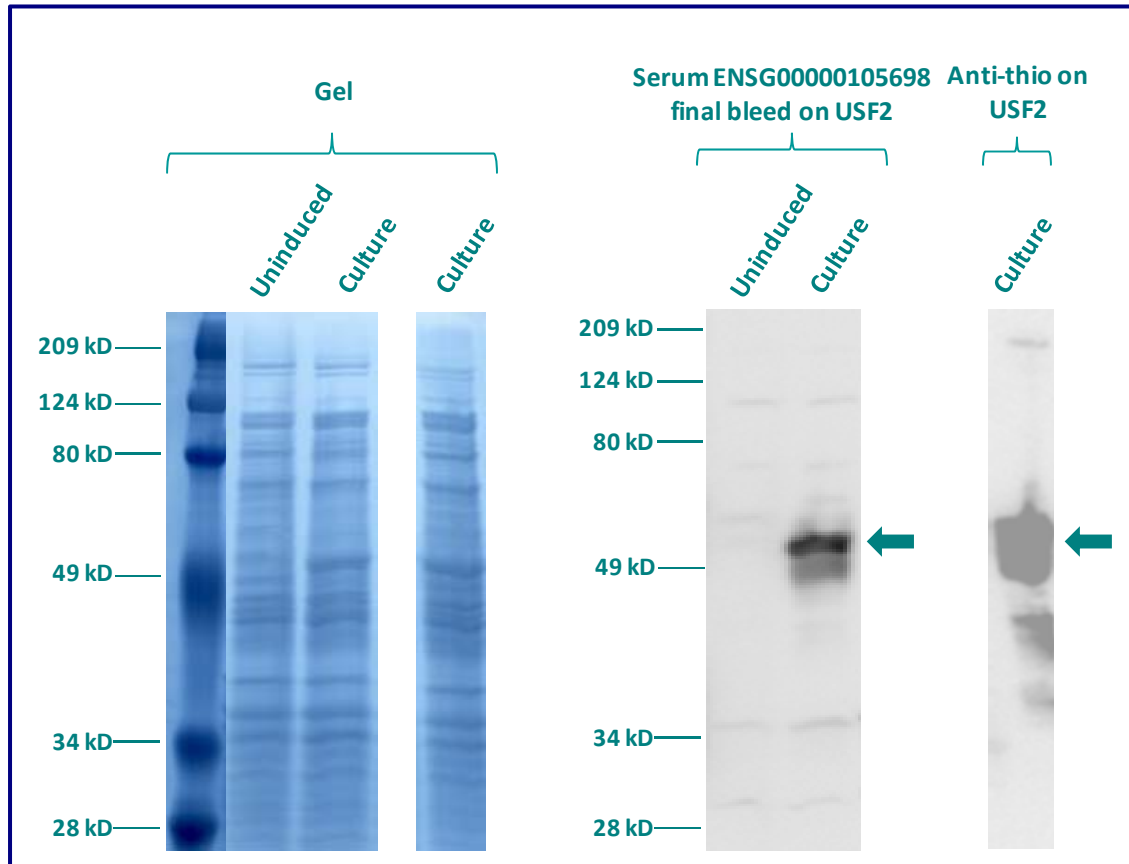
WESTERN BLOT ON RECOMBINANT PROTEIN

The serum ENSG00000105698 has been tested at 1/1000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

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

Plasmid name : pBAD-DEST49.

Molecular weight of USF2 : 51kDa (37kDa + 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 crude serum ENSG00000105698 at 1: 500
- 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**

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Upstream stimulatory factor 2 (USF2) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The crude serum ENSG00000105698 has been tested at 1/500.

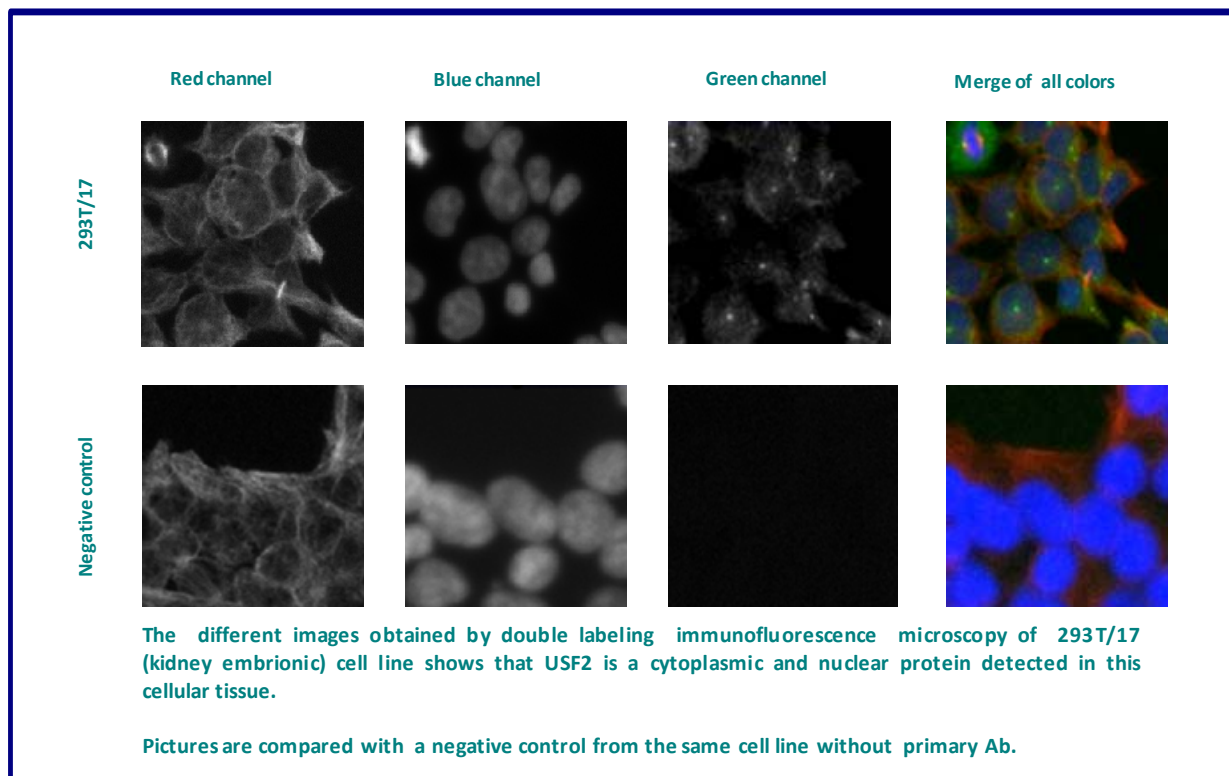
Red staining : cytoskeleton (microtubules/ α -tubuline)

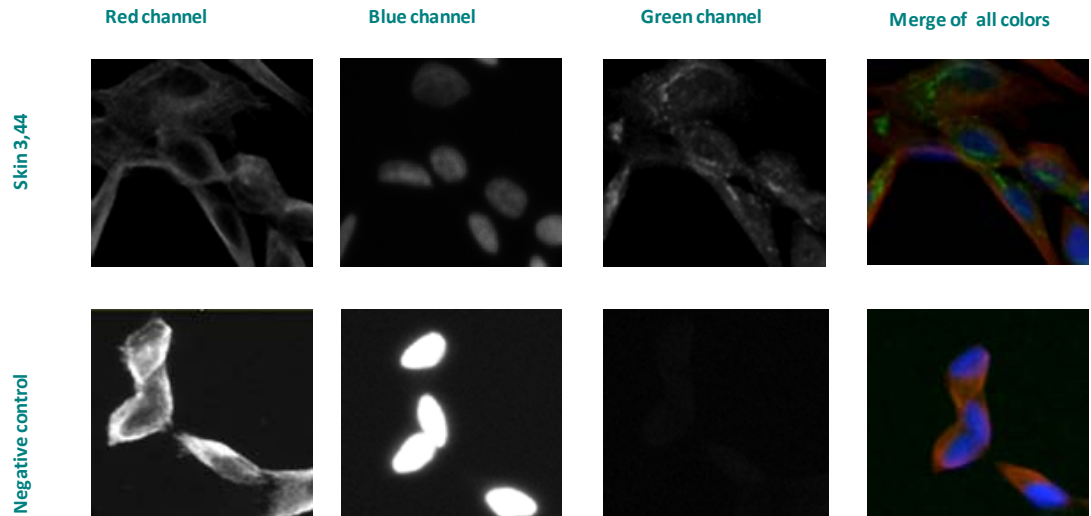
Blue staining : nucleus (Hoechst)

Green staining : anti- USF2 antibody

Expected subcellular location : Nucleus

Expected tissue specificity : Ubiquitous





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that USF2 is a cytoplasmic protein detected in this cellular tissue.

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

Remaining cell lines tested gave a positive result with a cytoplasmic and nuclear distribution.