

PRODUCT INFORMATION

Product name : TFEC antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to TFEC

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : TFEC

Gene Name : Transcription factor EC

Ensembl ID : ENSG00000105967

Entrez GeneID : 22797

GenBank Accession number : D43945

Omim ID : 604732

Swiss-Prot : O14948

Molecular weight of TFEC: 38.7kDa

Function: Transcriptional regulator that acts as a repressor or an activator. Acts as a transcriptional repressor on minimal promoter containing element F (that includes an E-box sequence). Binds to element F in an E-box sequence-specific manner. Acts as a transcriptional transactivator on the proximal promoter region of the tartrate-resistant acid phosphatase (TRAP) E-box containing promoter Collaborates with MITF in target gene activation Acts as a transcriptional repressor on minimal promoter containing mu E3 enhancer sequence. Binds to mu E3 DNA sequence of the immunoglobulin heavy-chain gene enhancer. Binds DNA in a homo- or heterodimeric form

Expected subcellular localization : Nucleus

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/ 7000 is determined. Appropriate specificity controls were run.
- **WB:** 1:3500
- **IF:** 1/1000.

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.

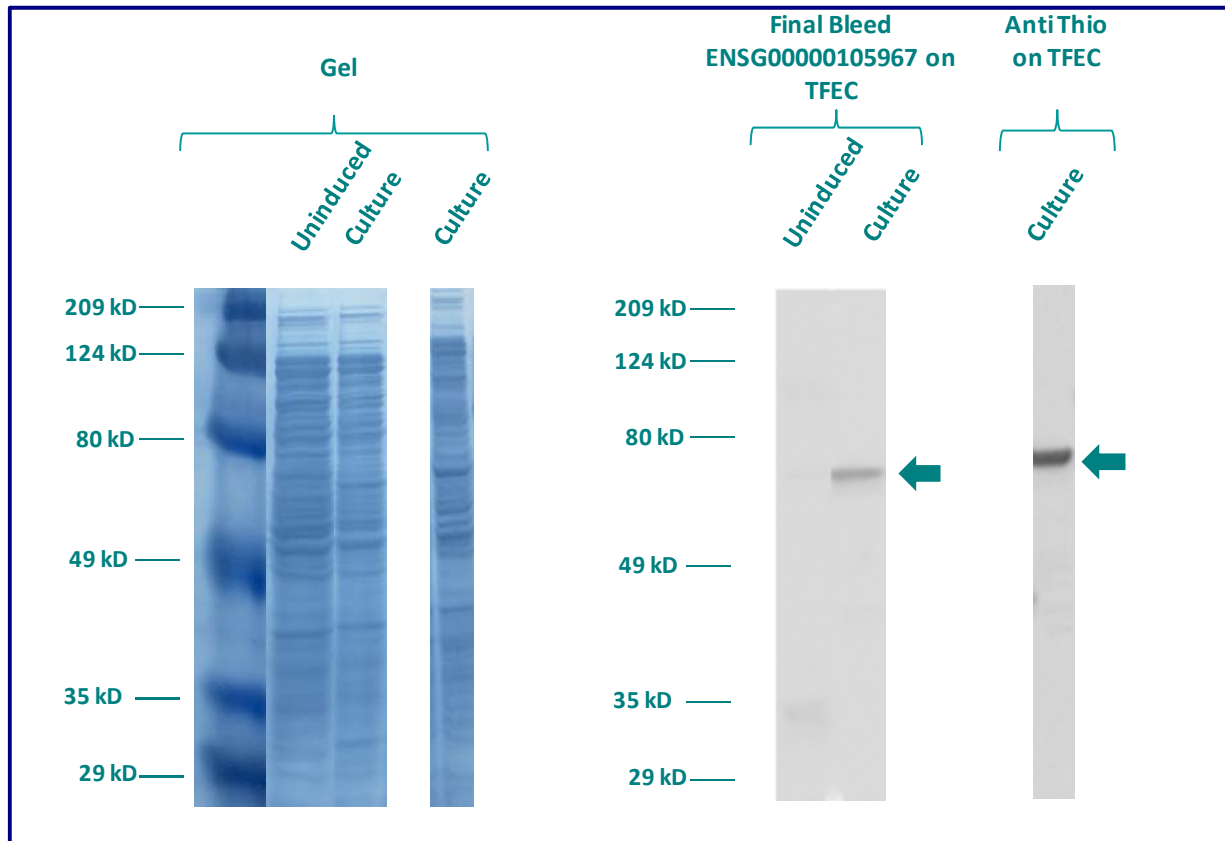
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000105967 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 TFEC : 52.8kDa (38.8kDa + 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 ENSG00000105967 at 1: 3500
- 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 Transcription factor EC (TFEC) expression in 5 cells lines (HELA, Capan-2, SAOS-2, SH-SY5Y, Skin 3.44). The purified Antibody ENSG00000105967 has been tested at 1/5000.

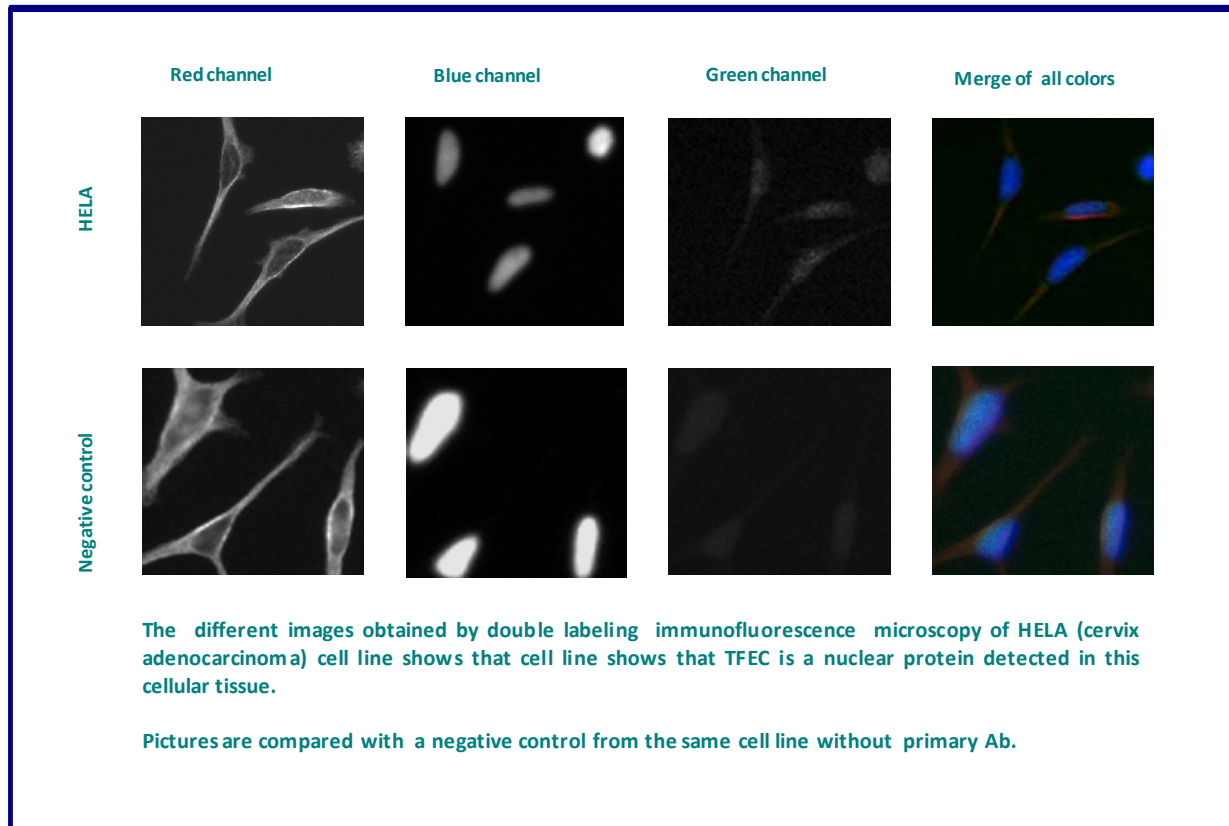
Red staining : cytoskeleton (microtubules/ α -tubuline)

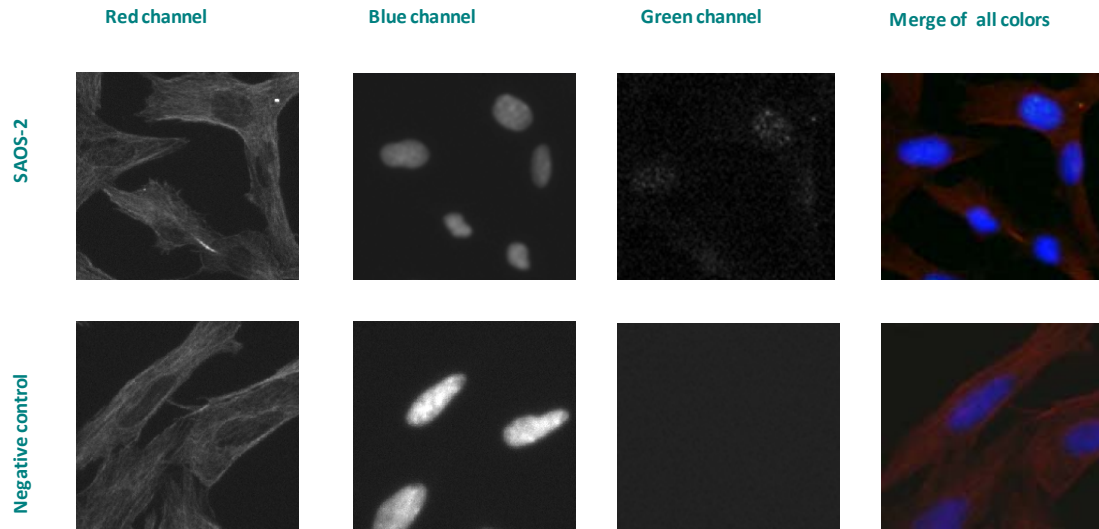
Blue staining : nucleus (Hoechst)

Green staining : anti- TFEC antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Expressed moderately in spleen, kidney, bone marrow, small intestine and leukocytes. Expressed weakly in testis, trachea and colon.





The merge of staining obtained by double labeling immunofluorescence microscopy of SAOS-2 (osteosarcoma) cell line shows that cell line shows that TFEC is a nuclear 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 the same distribution