

PRODUCT INFORMATION

Product name : GATA3 antibody

Product type : Primary antibodies

Description : Mouse monoclonal to GATA3

Immunogen : 1 synthetic peptide (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : GATA3

Gene Name : GATA binding protein 3

Ensembl ID : ENSG00000107485

Entrez GeneID : 2625

GenBank Accession number : X55122

Swiss-Prot : P23771

Molecular weight : 47.9 & 48kDa

Function : Transcriptional activator which binds to the enhancer of the T-cell receptor alpha and delta genes. Binds to the consensus sequence 5'-AGATAG-3'.

Expected subcellular localization : Nucleus.

Expected tissue location : T-cells and endothelial cells.

Summary : This gene encodes a protein which belongs to the GATA family of transcription factors. The protein contains two GATA-type zinc fingers and is an important regulator of T-cell development and plays an important role in endothelial cell biology. Defects in this gene are the cause of hypoparathyroidism with sensorineural deafness and renal dysplasia. [provided by RefSeq, Nov 2009].

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 1 immunogen peptide. A titer of 6000 has been determined. Appropriate specificity controls were run.
- **WB:** Dilution 1/10000
- **IF:** Dilution 1/1000

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

Raised in : Mouse

Clonality : Monoclonal

Isotype : IgG

Purity : Purified Antibody

Concentration: 2mg/ml

Storage buffer : Containing a final concentration of PBS/glycerol (V/V), 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

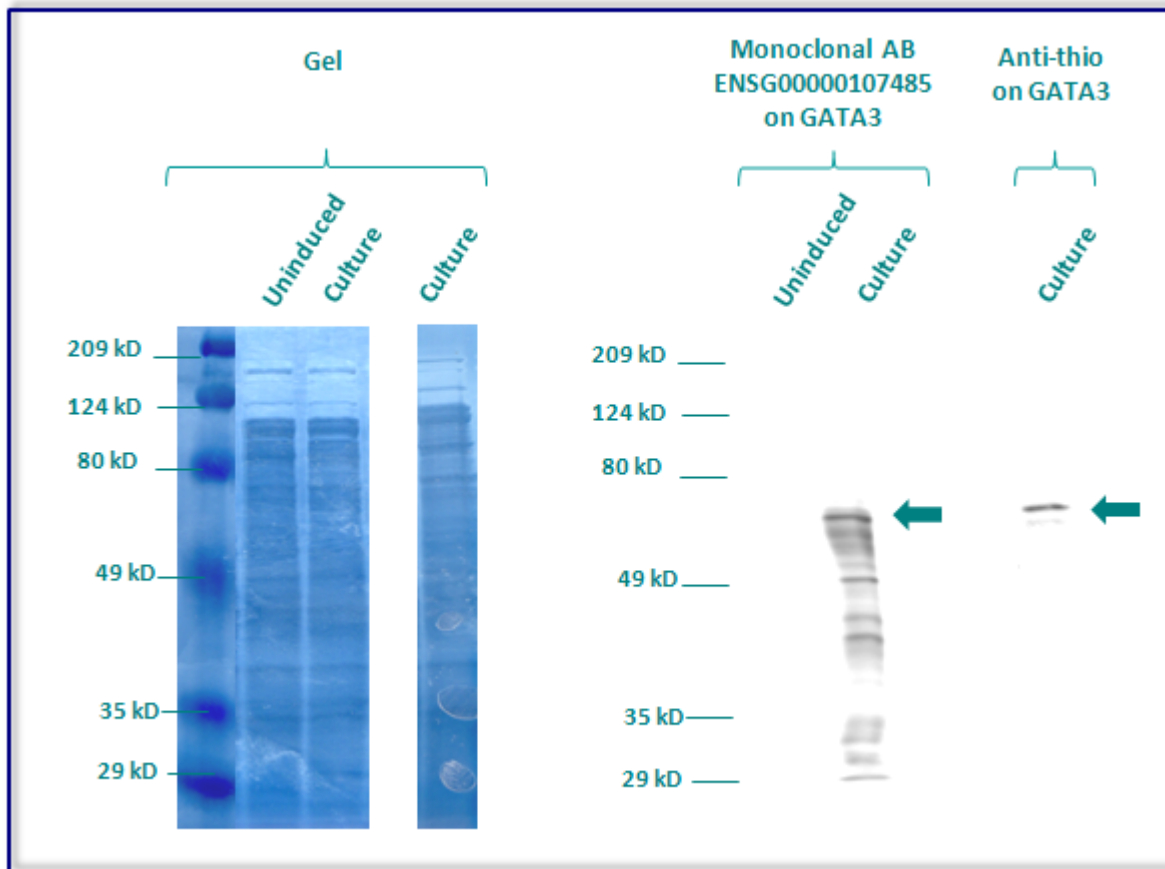
The monoclonal purified antibody ENSG00000107485 has tested at 1/10000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

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

Clone : 8D3C12B10, Isotype : G2a; kappa

Plasmid name : pBAD-DEST49.

Molecular weight of GATA3 : 61.9kDa (47.9kDa + 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 ENSG00000107485 at 1:10000
- Dilute the anti-thio at 1:5000

60 minutes of incubation

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

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

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Trans-acting T-cell-specific transcription factor GATA-3 (GATA3) expression in 5 cells lines (HELA, 293T/17, Capan-2, SH-SY5Y, Skin 3,44). The monoclonal antibody ENSG00000107485 has been tested at 1/1000.

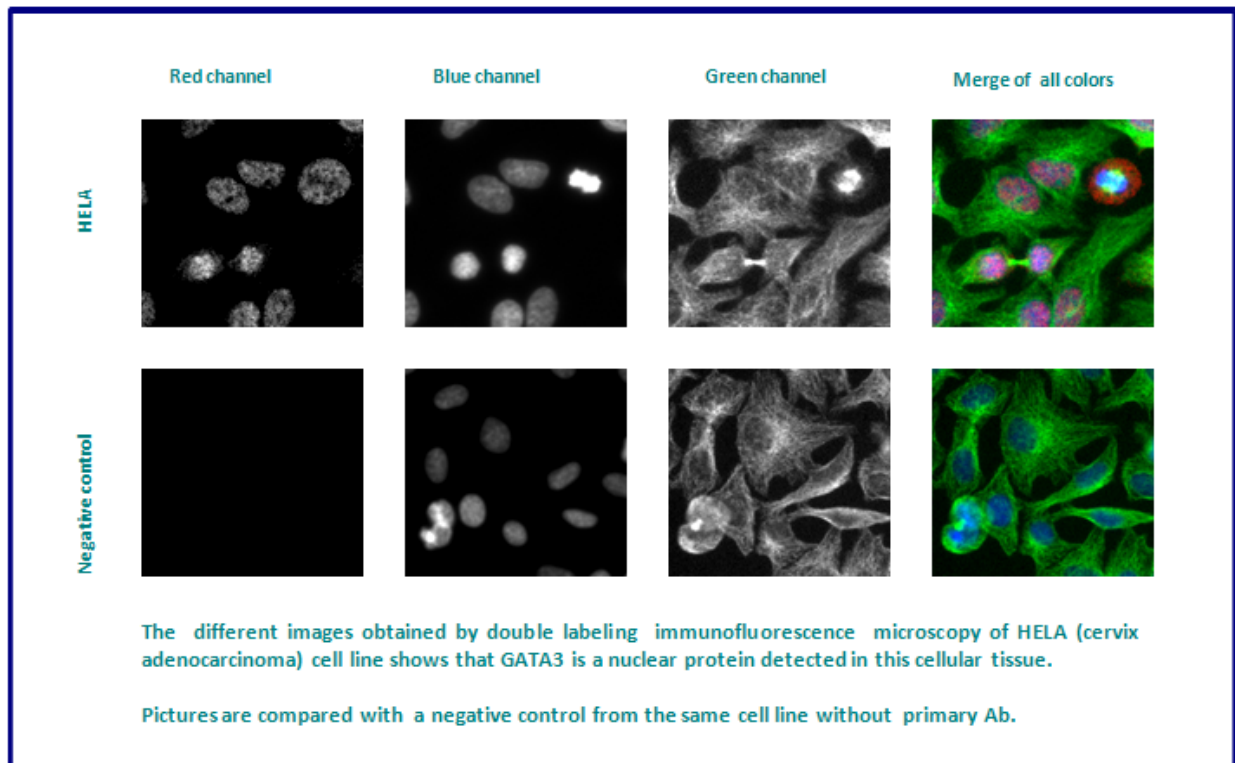
Green staining : cytoskeleton (microtubules/ α -tubuline)

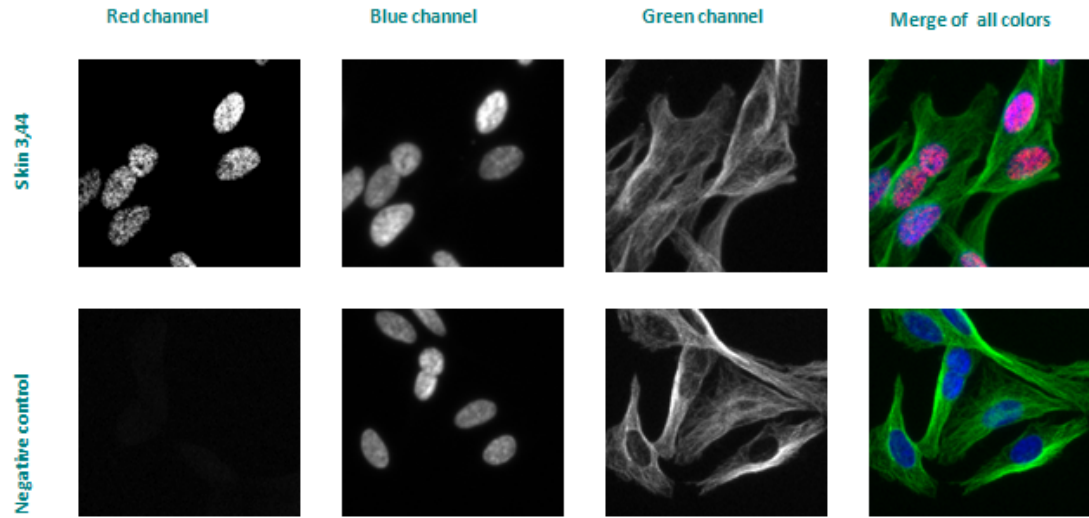
Blue staining : nucleus (Hoechst)

Red staining : anti- GATA3 antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : T-cells and endothelial cells





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that GATA3 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 results with a nuclear distribution.