

PRODUCT INFORMATION

Product name : POU4F3 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to POU4F3

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : POU4F3

Gene Name : POU class 4 homeobox 3

Ensembl ID : ENSG00000091010

Entrez GeneID : 5459

GenBank Accession number : U10060

Omim ID : 602460

Swiss-Prot : Q15319

Molecular weight of POU4F3 : 37.1kDa

Function : May play a role in determining or maintaining the identities of a small subset of visual system neurons.

Expected subcellular localization : Nucleus.

Summary : This gene encodes a member of the POU-domain family of transcription factors. POU-domain proteins have been observed to play important roles in control of cell identity in several systems. This protein is found in the retina and may play a role in determining or maintaining the identities of a small subset of visual system neurons. Defects in this gene are the cause of non-syndromic sensorineural deafness autosomal dominant type 15 [provided by RefSeq].

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/9000 is determined for one of the three peptides. Appropriate specificity controls were run.
- **WB:** 1/500.
- **IF:** 1/250.

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

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Crude serum, final bleed

Storage buffer : Crude serum

Form : Liquid

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

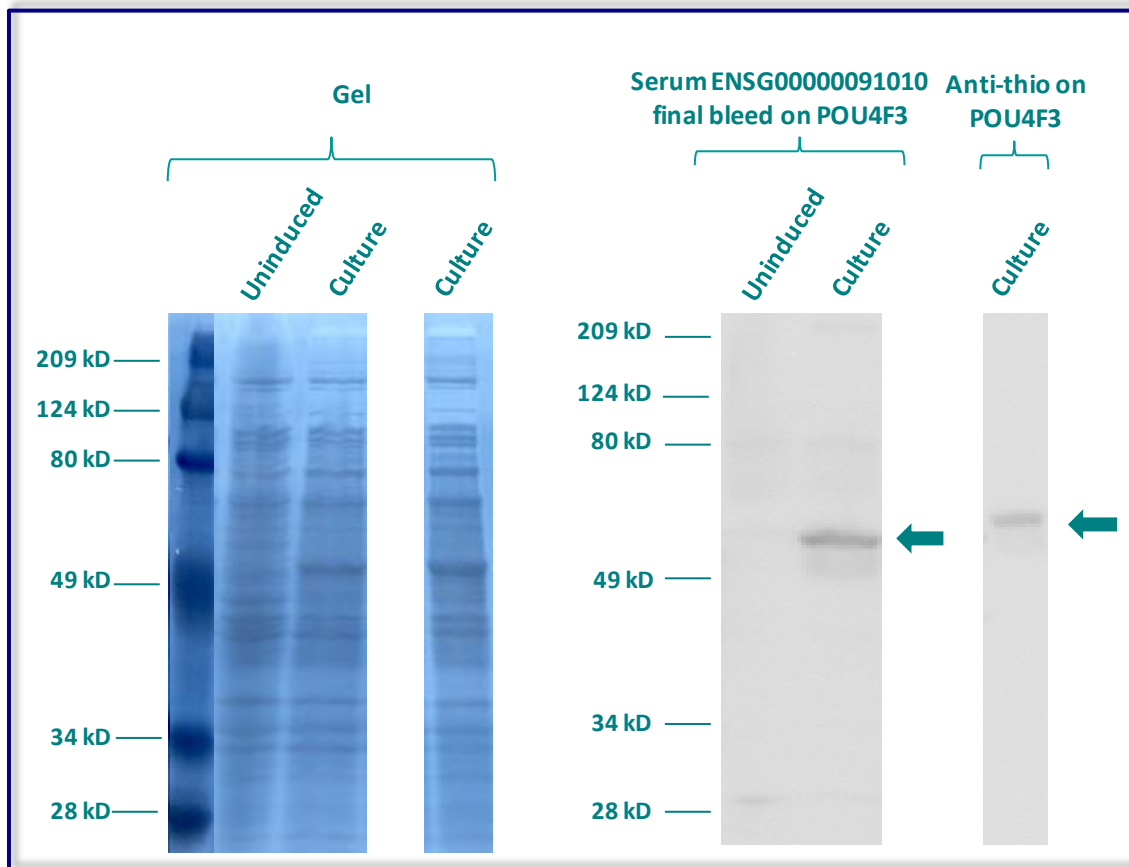
WESTERN BLOT ON RECOMBINANT PROTEIN

The serum ENSG00000091010 has been tested at 1/500 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 POU4F3 : 51.1kDa (37.1kDa + another 14kDa for the tag).



NOTE: THE SERUM DOES NOT DETECT THE PROTEIN IN THE FOLLOWING CELL LYSATES (HeLa, SAOS 2, SH-SY5Y, SKIN 3.44 & 293T17) AT A DILUTION OF 1:250.

Gel concentration: 10%

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

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

- Dilute the serum ENSG00000091010 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 1/1000
- 60 minutes of incubation**

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of POU domain, class 4, transcription factor 3 (POU4F3) expression in 3 cells lines (293T/17, Capan-2, Skin 3.44). The crude serum ENSG00000091010 has been tested at 1/250.

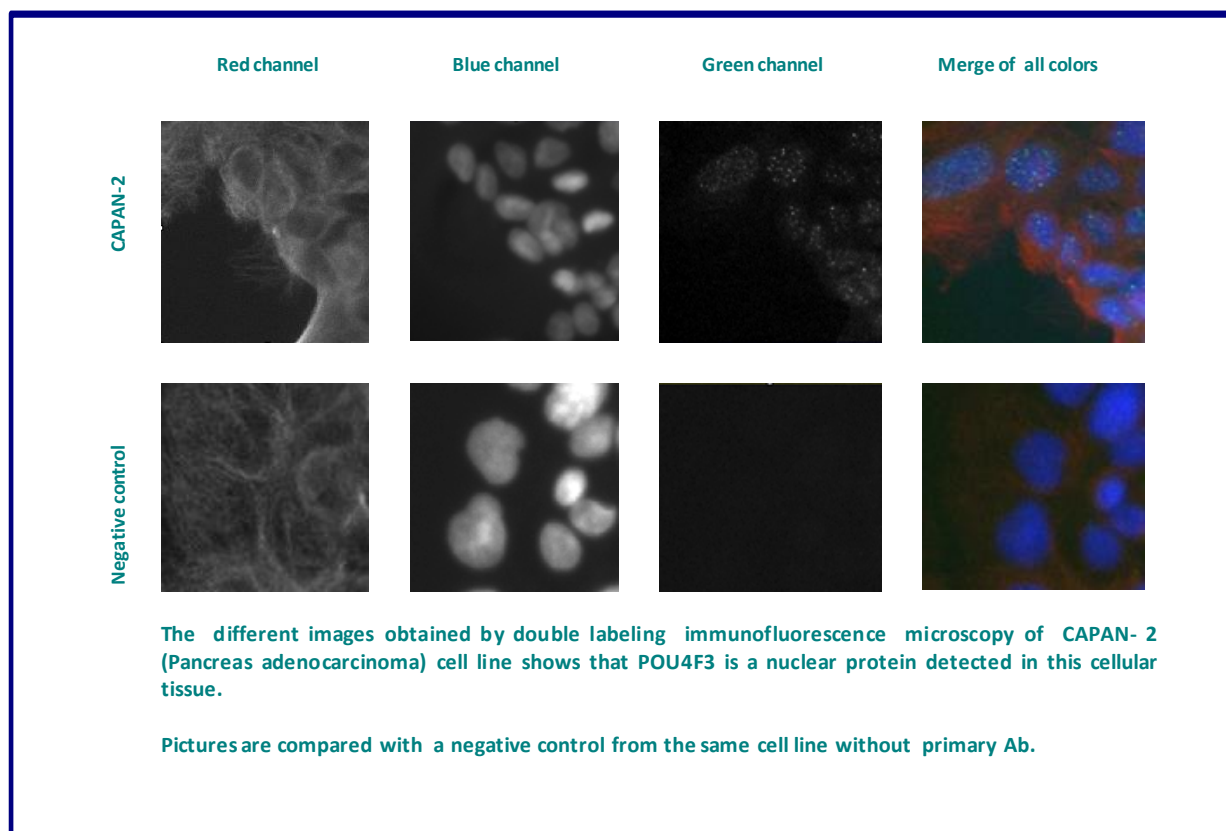
Red staining : cytoskeleton (microtubules/ α -tubuline)

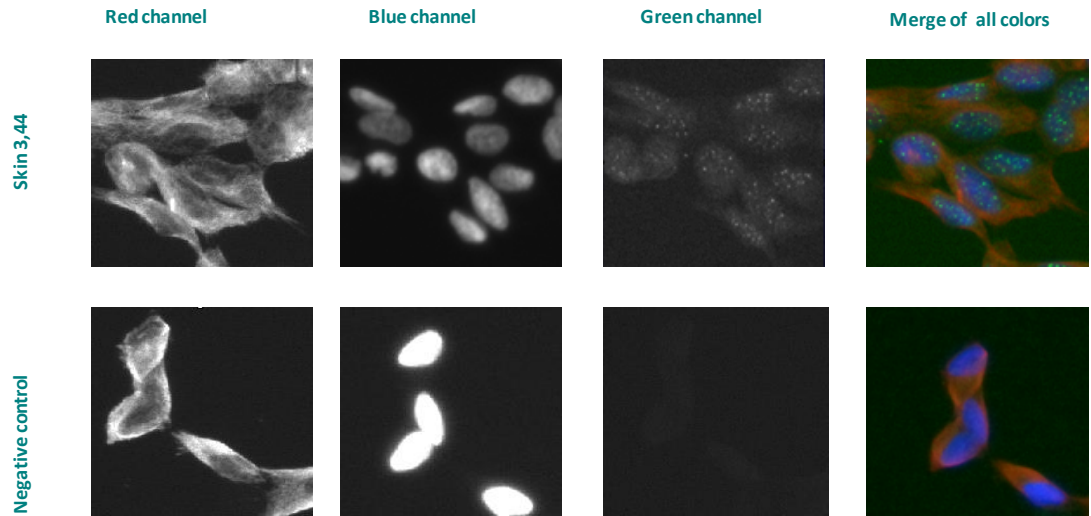
Blue staining : nucleus (Hoechst)

Green staining : anti- POU4F3 antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Brain. Seems to be specific to the retina





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that POU4F3 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 a nuclear distribution