

PRODUCT INFORMATION

Product name : PITX1 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to PITX1

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : PITX1

Gene Name : paired-like homeodomain 1

Ensembl ID : ENSG00000069011

Entrez GeneID : 5307

GenBank Accession number : AF009648

Omim ID : 602149

Swiss-Prot : P78337

Molecular weight of PITX1 : 34.1kDa

Function : May play a role in the development of anterior structures, and in particular, the brain and facies and in specifying the identity or structure of hindlimb.

Expected subcellular localization : Nucleus

Summary : This gene encodes a member of the RIEG/PITX homeobox family, which is in the bicoid class of homeodomain proteins. Members of this family are involved in organ development and left-right asymmetry. This protein acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin [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/ 10000 is determined. Appropriate specificity controls were run.
- **WB:** 1/5000.
- **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.

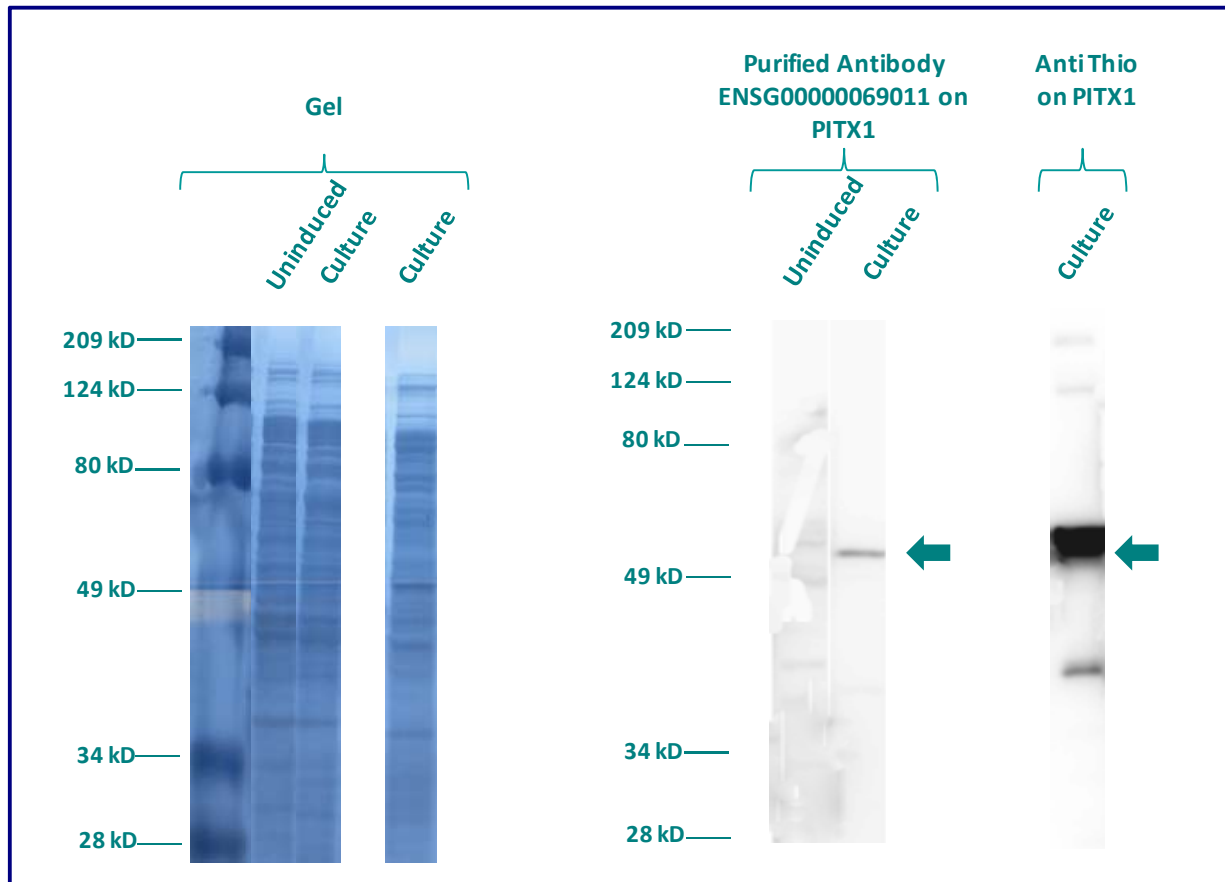
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000069011 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 PITX1 : 48.1kDa (34.1kDa + 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 ENSG00000069011 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

IMMUNOFLUORESCENCE ANALYSIS

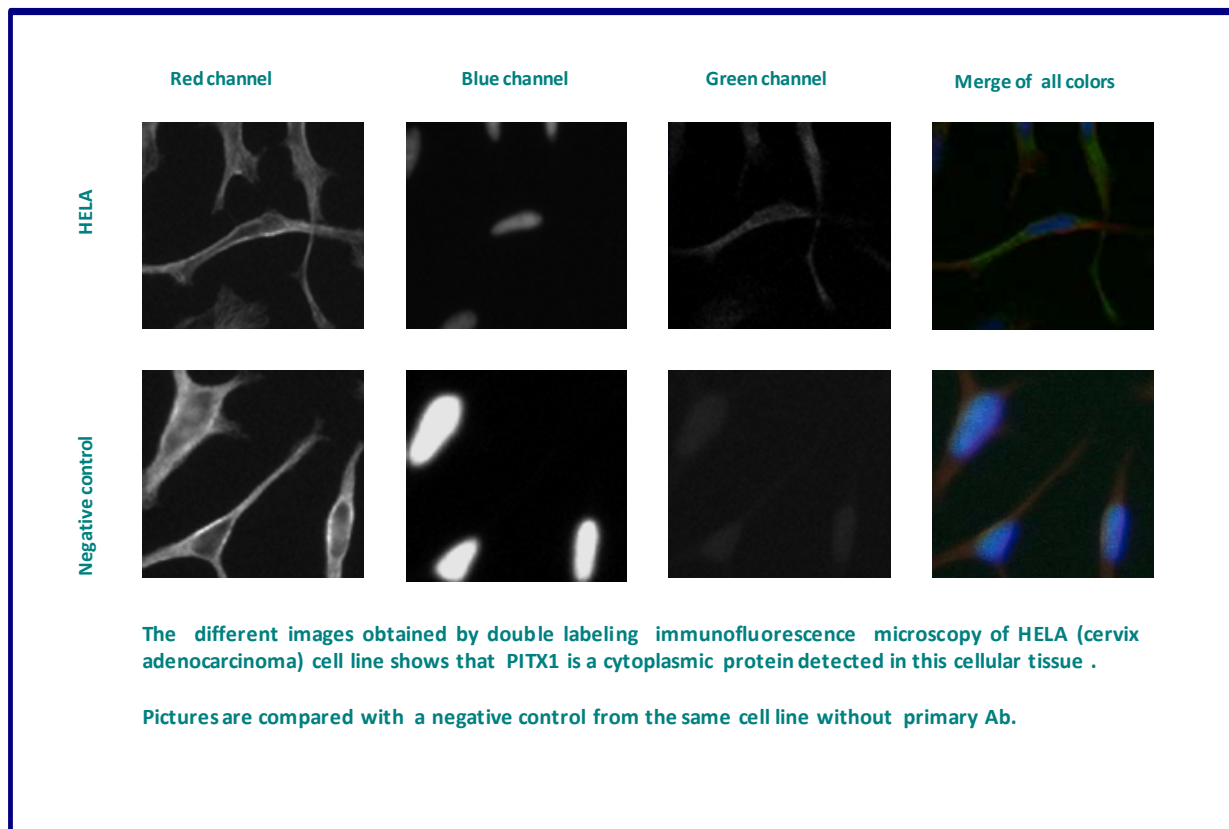
Immunofluorescence analysis of Pituitary homeobox 1 (PITX1) expression in 3 cells lines (HELA, Capan-2, Skin 3.44). The purified Antibody ENSG00000069011 has been tested at 1/5000.

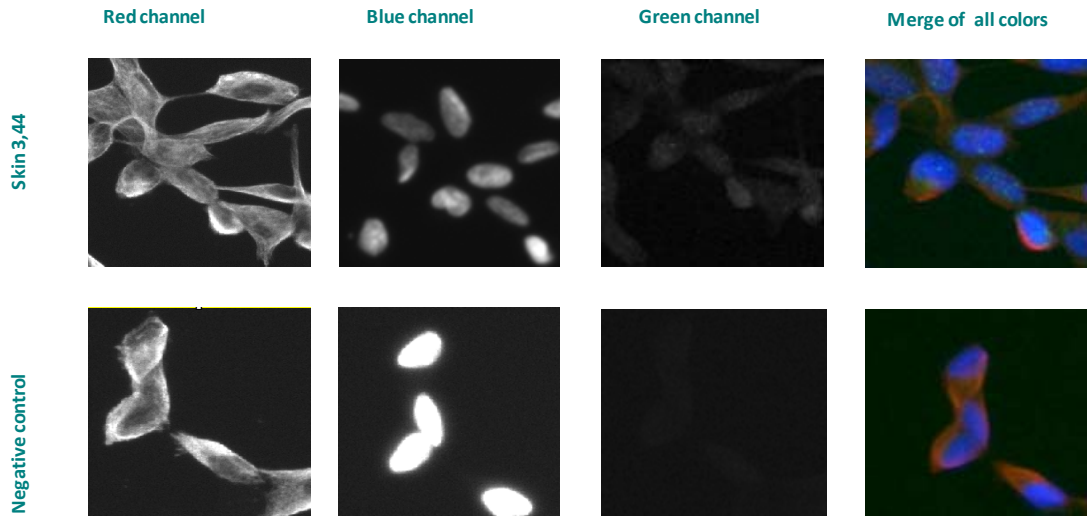
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- PITX1 antibody (purified)

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that PITX1 is a nuclear and 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 the same distribution