

PRODUCT INFORMATION

Product name : NKX2-2 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to NKX2-2

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : NKX2-2

Gene Name : NK2 homeobox 2

Ensembl ID : ENSG00000125820

Entrez GeneID : 4821

GenBank Accession number : AF019415

Omim ID : 604612

Swiss-Prot : O95096

Molecular weight of NKX2-2 : 30.1 kDa

Function : May be involved in specifying diencephalic neuromeric boundaries, and in controlling the expression of genes that play a role in axonal guidance

Expected subcellular localization : Nucleus

Summary : The protein encoded by this gene contains a homeobox domain and may be involved in the morphogenesis of the central nervous system. This gene is found on chromosome 20 near NKX2-4, and these two genes appear to be duplicated on chromosome 14 in the form of TITF1 and NKX2-8. The encoded protein is likely to be a nuclear transcription factor. [provided by RefSeq]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A titer of 1/10000 has been 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.

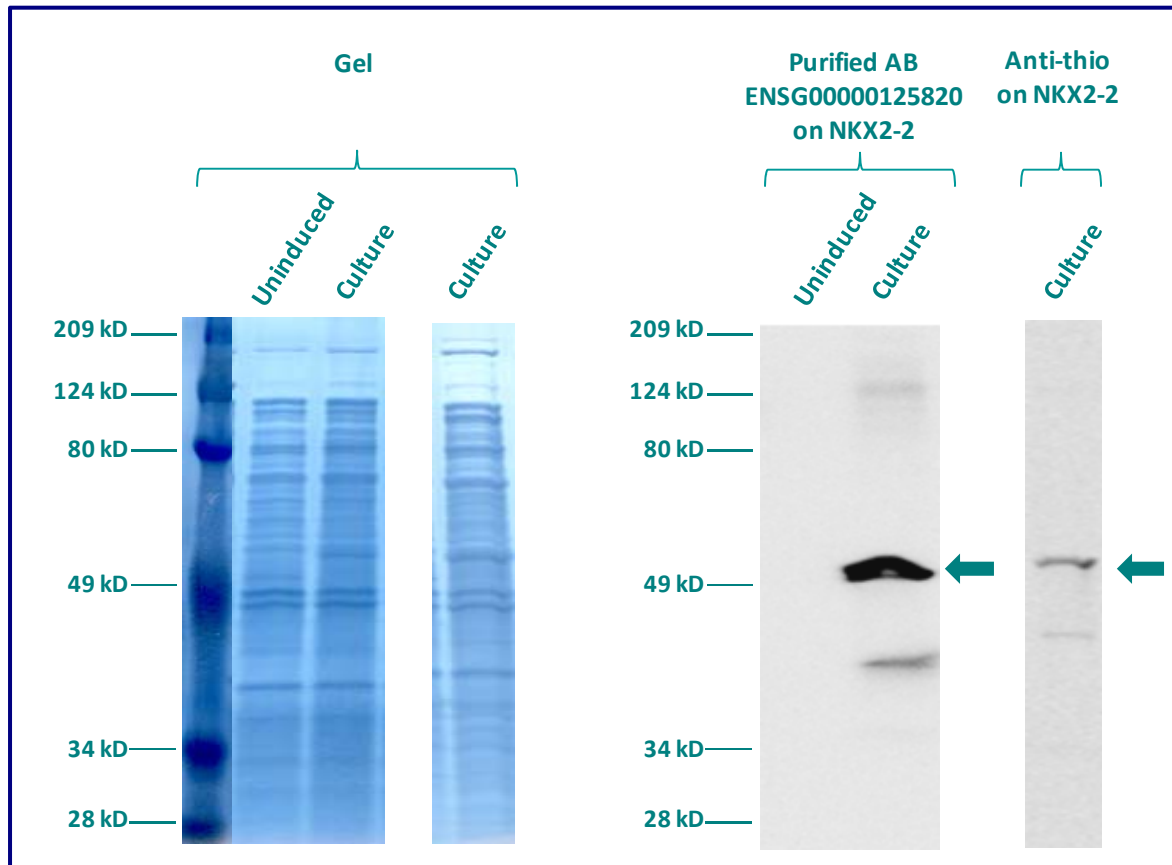
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000125820 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 NKX2-2 : 44.1kDa (30.1kDa + 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 ENSG00000125820 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

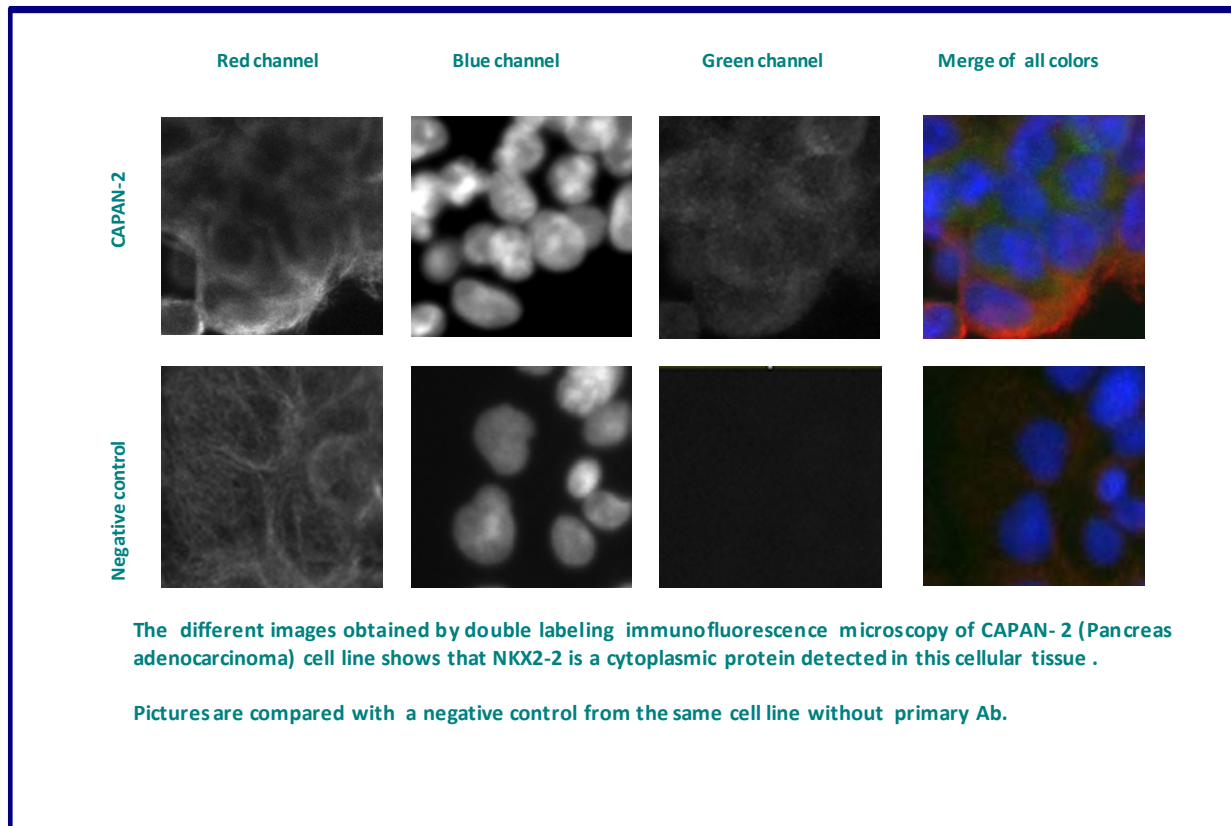
Immunofluorescence analysis of Homeobox protein Nkx-2.2 (NKX2-2) expression in 2 cells lines (Capan-2, Skin 3,44). The purified Antibody ENSG00000125820 has been tested at 1/5000.

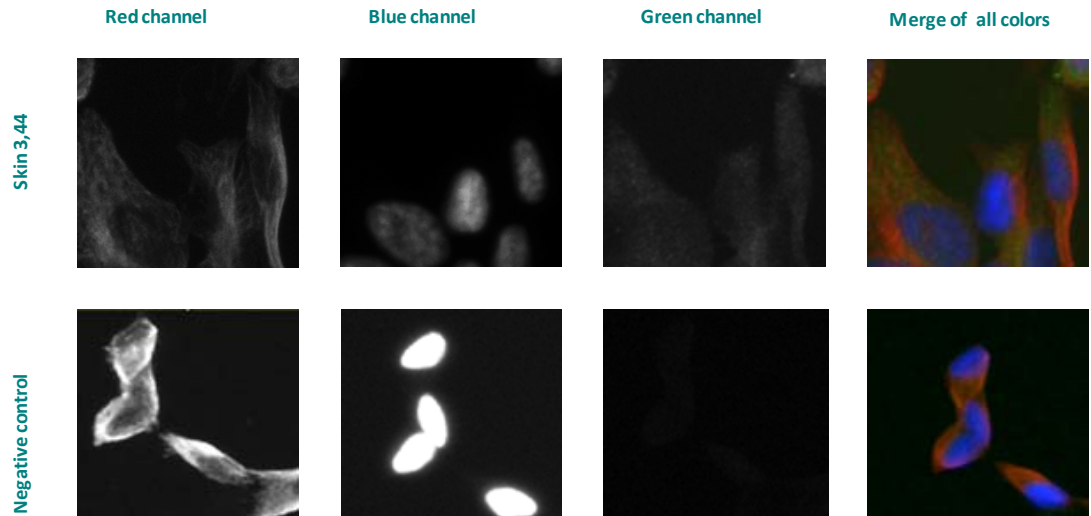
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- NKX2-2 antibody (purified)

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that NKX2-2 is a cytoplasmic protein detected in this cellular tissue .

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