

PRODUCT INFORMATION

Product name : MEOX2 antibody

Product type : Primary antibodies

Description : Mouse monoclonal to MEOX2

Immunogen : 1 synthetic peptide (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : MEOX2

Gene Name : mesenchyme homeobox 2

Ensembl ID : ENSG00000106511

Entrez GeneID : 4223

Swiss-Prot : P50222

Molecular weight : 33.6kDa

Function : Role in mesoderm induction and its earliest regional specification, somitogenesis, and myogenic and sclerotomal differentiation. May have a regulatory role when quiescent vascular smooth muscle cells reenter the cell cycle.

Expected subcellular localization : Nucleus. Nucleus speckle

Expected tissue specificity : Embryo and placenta

Summary : This gene encodes a member of a subfamily of non-clustered, diverged, antennapedia-like homeobox-containing genes. The encoded protein may play a role in the regulation of vertebrate limb myogenesis. Mutations in the related mouse protein may be associated with craniofacial and/or skeletal abnormalities, in addition to neurovascular dysfunction observed in Alzheimer's disease. [provided by RefSeq, Jul 2008]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 1 immunogen peptide. A titer of 34500 has been determined. Appropriate specificity controls were run.
- **WB:** Dilution 1/5000
- **IF:** Dilution 1/50

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

Raised in : Mouse

Clonality : Monoclonal

Isotype : IgG

Purity : Purified Antibody

Concentration: 0.5mg/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

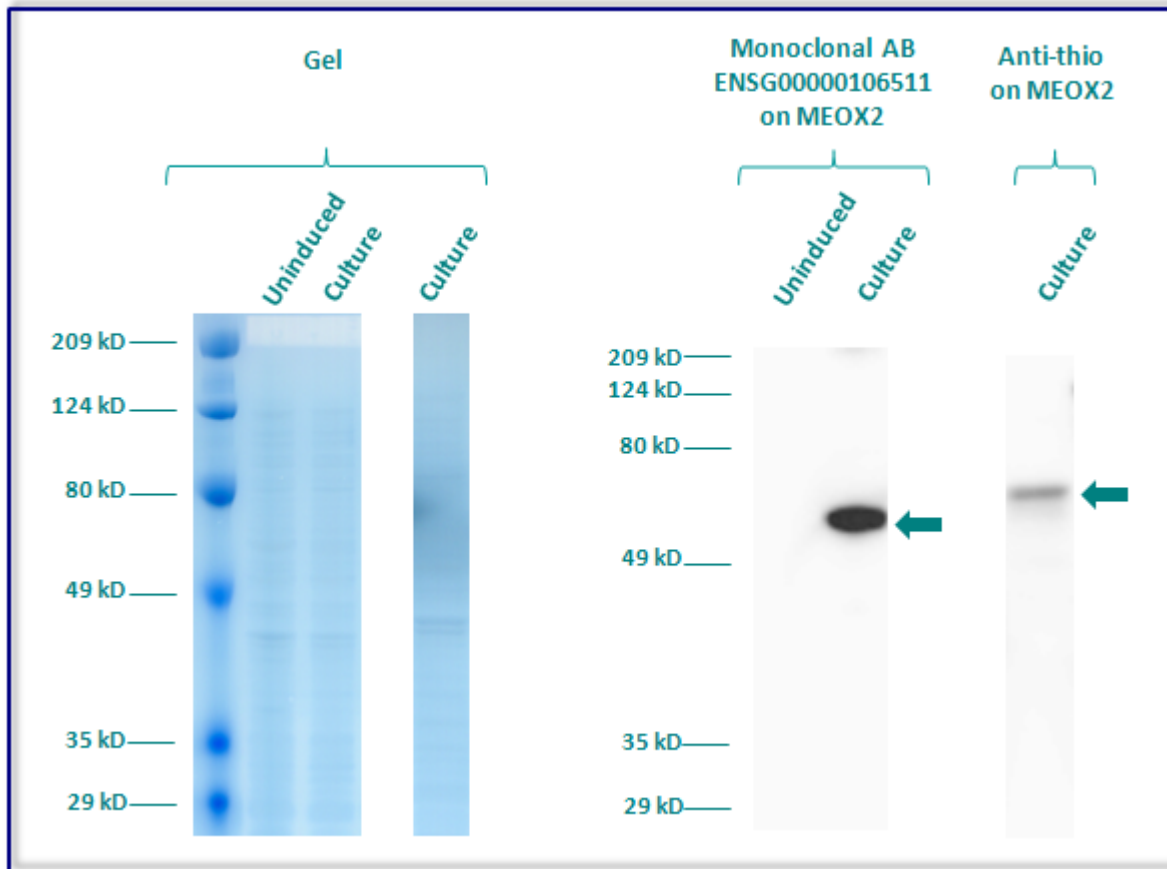
The monoclonal purified antibody ENSG00000106511 has tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

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 : 6A3D10H8, Isotype : G1; kappa

Plasmid name : pBAD-DEST49.

Molecular weight of MEOX2 : 47.6kDa (33.6kDa + 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 ENSG00000106511 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-Mouse IgG HRP conjugated at 1/10000
- 60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Homeobox protein MOX-2 (MEOX2) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The monoclonal antibody ENSG00000106511 has been tested at 1/50.

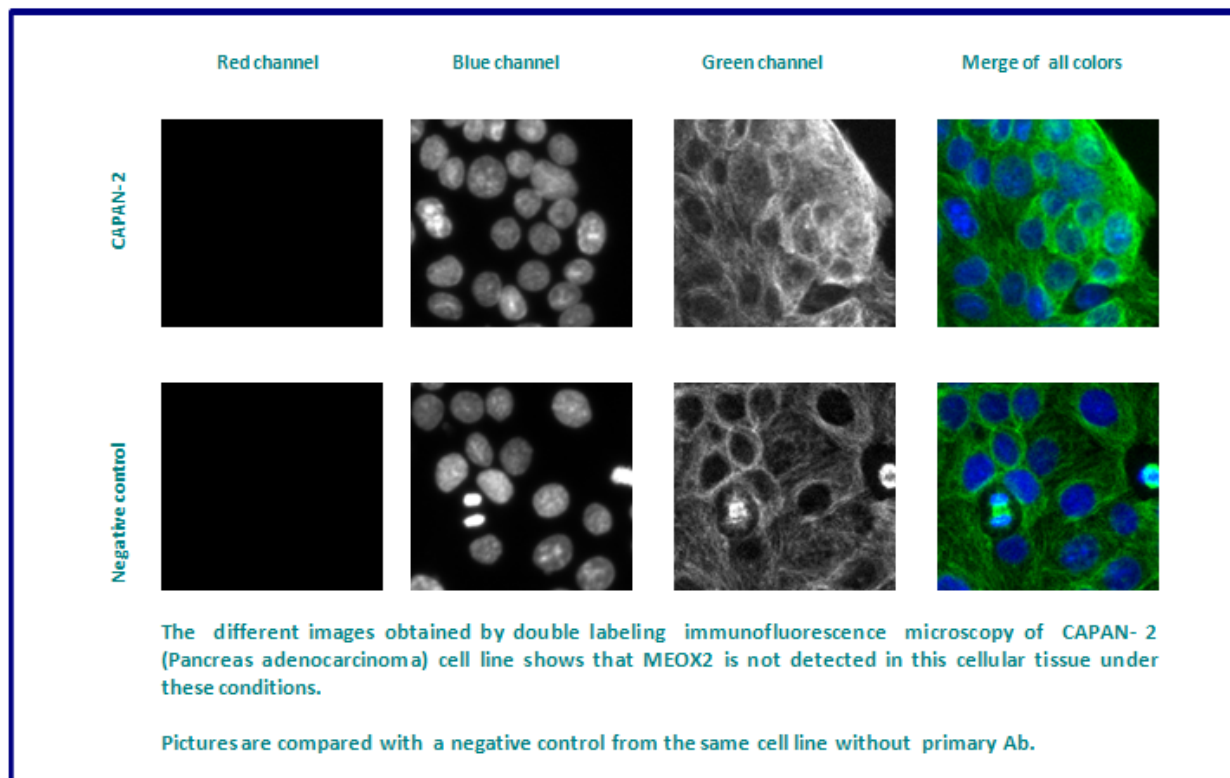
Green staining : cytoskeleton (microtubules/ α -tubuline)

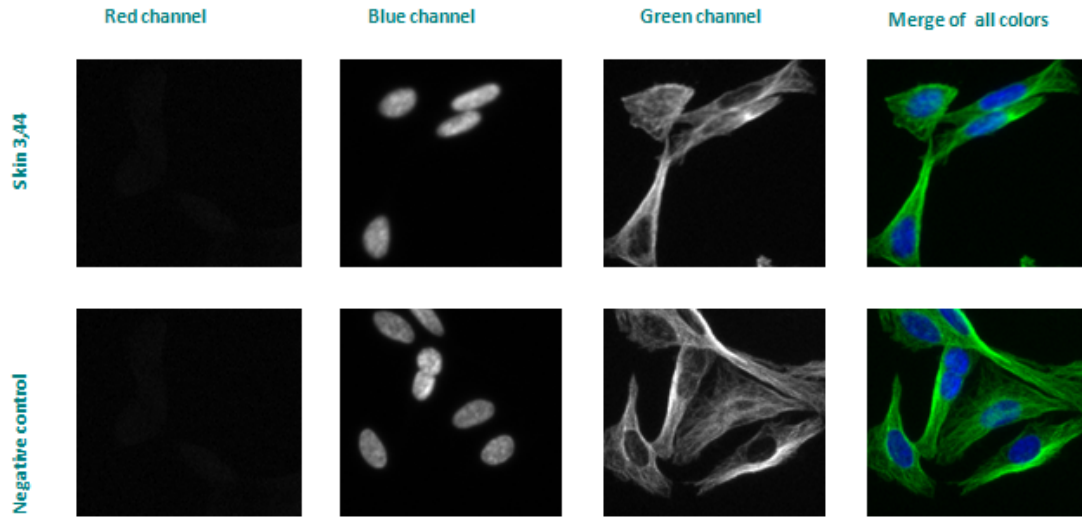
Blue staining : nucleus (Hoechst)

Red staining : anti- MEOX2 antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Embryo and placenta





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that MEOX2 is not detected in this cellular tissue under these conditions.

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

Remaining cell lines tested gave a negative result under these conditions.