

PRODUCT INFORMATION

Product name : MYOG antibody

Product type : Primary antibodies

Description : Mouse monoclonal to MYOG

Immunogen : 1 synthetic peptide (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : MYOG

Gene Name : myogenin (myogenic factor 4)

Ensembl ID : ENSG00000122180

Entrez GeneID : 4656

GenBank Accession number : BC053899.1

Swiss-Prot : P15173

Molecular weight : 25kDa

Function : Involved in muscle differentiation (myogenic factor). Induces fibroblasts to differentiate into myoblasts. Probable sequence specific DNA-binding protein.

Expected subcellular localization : Nucleus.

Summary : Myogenin is a muscle-specific transcription factor that can induce myogenesis in a variety of cell types in tissue culture. It is a member of a large family of proteins related by sequence homology, the helix-loop-helix (HLH) proteins. It is essential for the development of functional skeletal muscle. [provided by RefSeq]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 1 immunogen peptide. A titer of 10 has been determined. Appropriate specificity controls were run.
- **WB:** Dilution 1/100
- **IF:** Dilution 1/50

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

Raised in : Mouse

Clonality : Monoclonal

Isotype : IgG

Purity : Purified Antibody

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

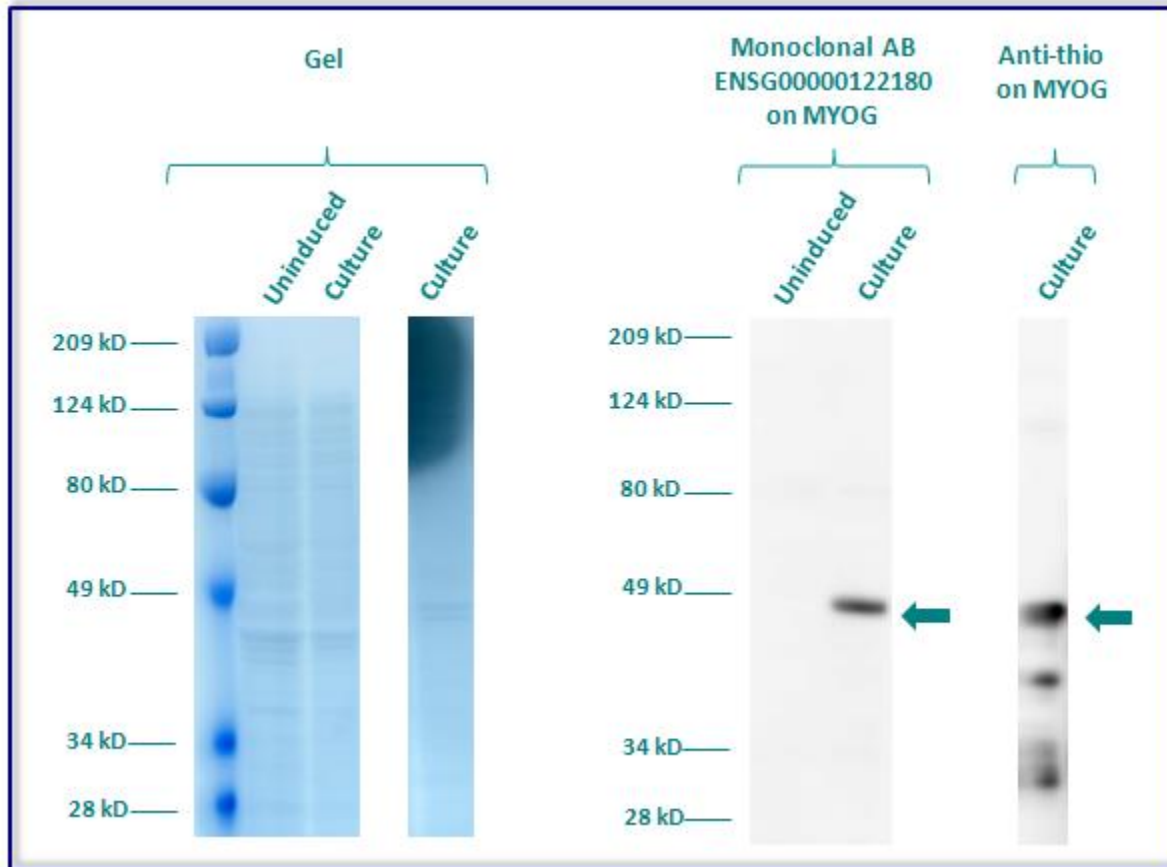
The monoclonal purified antibody ENSG00000122180 has tested at 1/100 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

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 : 2F4H4F9, Isotype : G1; kappa

Plasmid name : pBAD-DEST49.

Molecular weight of MYOG : 39kDa (25kDa + 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 ENSG00000122180 at 1:100
- 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

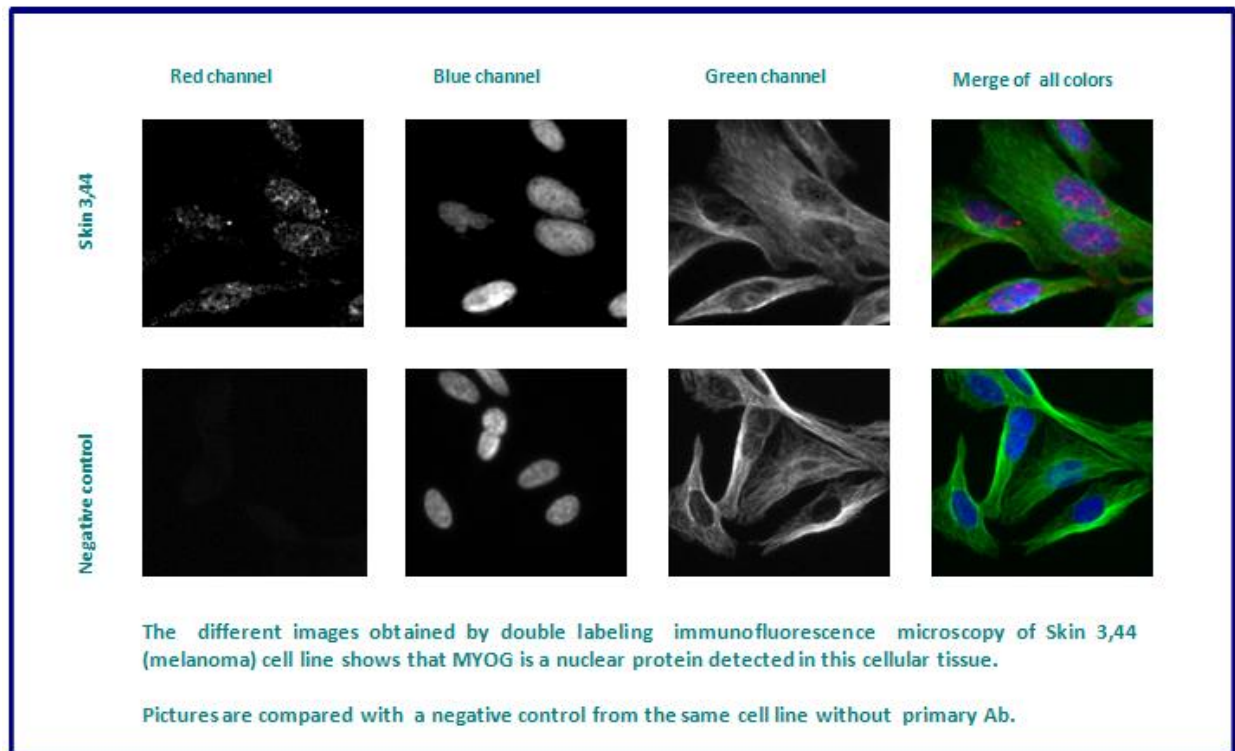
Immunofluorescence analysis of Myogenin (MYOG) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The monoclonal antibody ENSG00000122180 has been tested at 1/50.

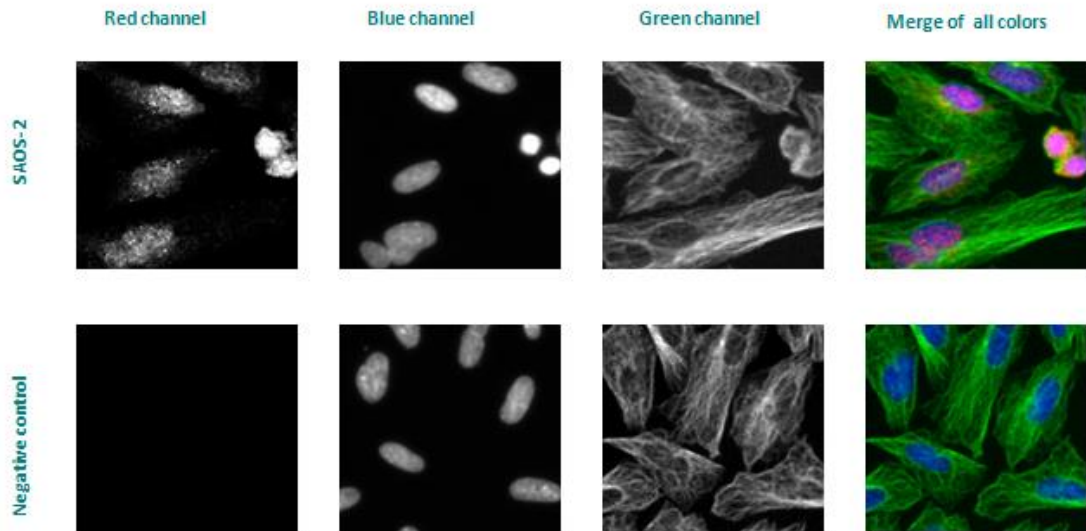
Green staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Red staining : anti- MYOG antibody (purified)

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of SAOS-2 (osteosarcoma) cell line shows that MYOG 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.