PRODUCT INFORMATION

Product name: MYOG antibody
Product type: Primary antibodies

Description: Rabbit polyclonal to MYOG

Immunogen: 3 synthetic peptides (human) conjugated to KLH

Reacts with: Hu, Ms

Tested applications: ELISA, WB and IF

GENE INFORMATION

Gene Symbol: MYOG

Gene Name: myogenin (myogenic factor 4)

Ensembl ID: ENSG00000122180

Entrez GeneID: 4656

GenBank Accession number: BC053899.1

Omim ID: 159980 Swiss-Prot: P15173

Molecular weight of MYOG: 25.037kDa

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]

Recommended dilution:

 ELISA: Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A titer of 1/34000 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.

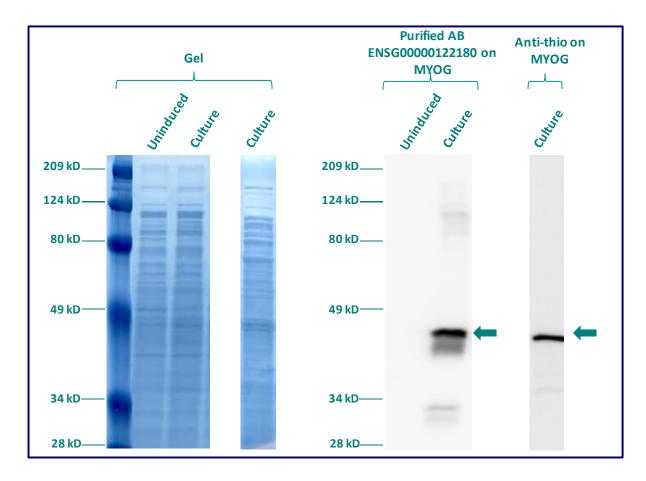
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000122180 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 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 1:5000
- 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 1/1000

60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

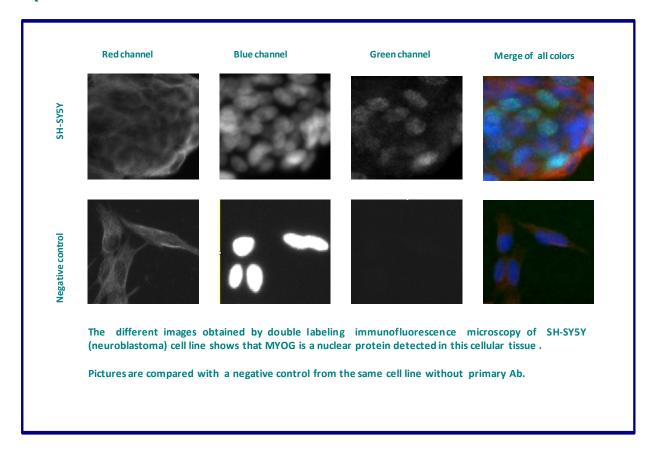
Immunofluorescence analysis of Myogenin (MYOG) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The purified Antibody ENSG00000122180 has been tested at 1/5000.

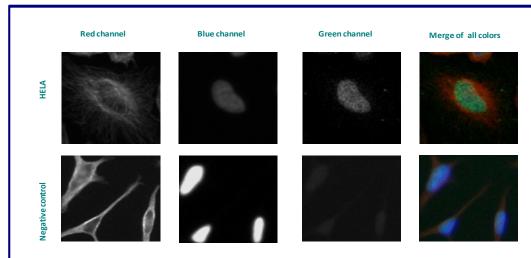
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining: nucleus (Hoechst)

Green staining: anti-MYOG antibody (purified)

Expected subcellular location: Nucleus

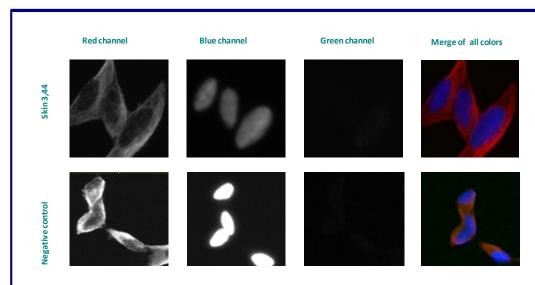




The different images obtained by double labeling immunofluorescence microscopy of HELA (cervix adenocarcinoma) cell line shows that MYOG is a nuclear protein detected in this cellular tissue .

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.



The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that MYOG 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 cel lines tested gave a negative result under these conditions.