

## PRODUCT INFORMATION

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**Product name :** MYF6 antibody

**Product type :** Primary antibodies

**Description :** Rabbit polyclonal to MYF6

**Immunogen :** 3 synthetic peptides (human) conjugated to KLH

**Reacts with :** Hu, Ms

**Tested applications :** ELISA, WB and IF

## GENE INFORMATION

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**Gene Symbol :** MYF6

**Gene Name :** myogenic factor 6 (herculin)

**Ensembl ID :** ENSG00000111046

**Entrez GeneID :** 4618

**GenBank Accession number :** BC017834.1

**Omim ID :** 159991

**Swiss-Prot :** P23409

**Molecular weight of MYF6 :** 26.953kDa

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

**Expected subcellular localization :** Nucleus.

**Expected tissue specificity :** Skeletal muscle

**Involvement in disease :** Defects in MYF6 may be a cause of centronuclear myopathy autosomal dominant (ADCNM) [MIM:160150]; also known as autosomal dominant myotubular myopathy. Centronuclear myopathies are congenital muscle disorders characterized by progressive muscular weakness and wasting involving mainly limb girdle, trunk, and neck muscles. It may also affect distal muscles. Weakness may be present during childhood or adolescence or may not become evident until the third decade of life. Ptosis is a frequent clinical feature. The most prominent histopathologic features include high frequency of centrally located nuclei in muscle fibers not secondary to regeneration, radial arrangement of sarcoplasmic strands around the central nuclei, and predominance and hypotrophy of type 1 fibers

## **APPLICATION NOTE**

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### **Recommended dilution :**

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A titer of 1/50000 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 polyclonal 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.

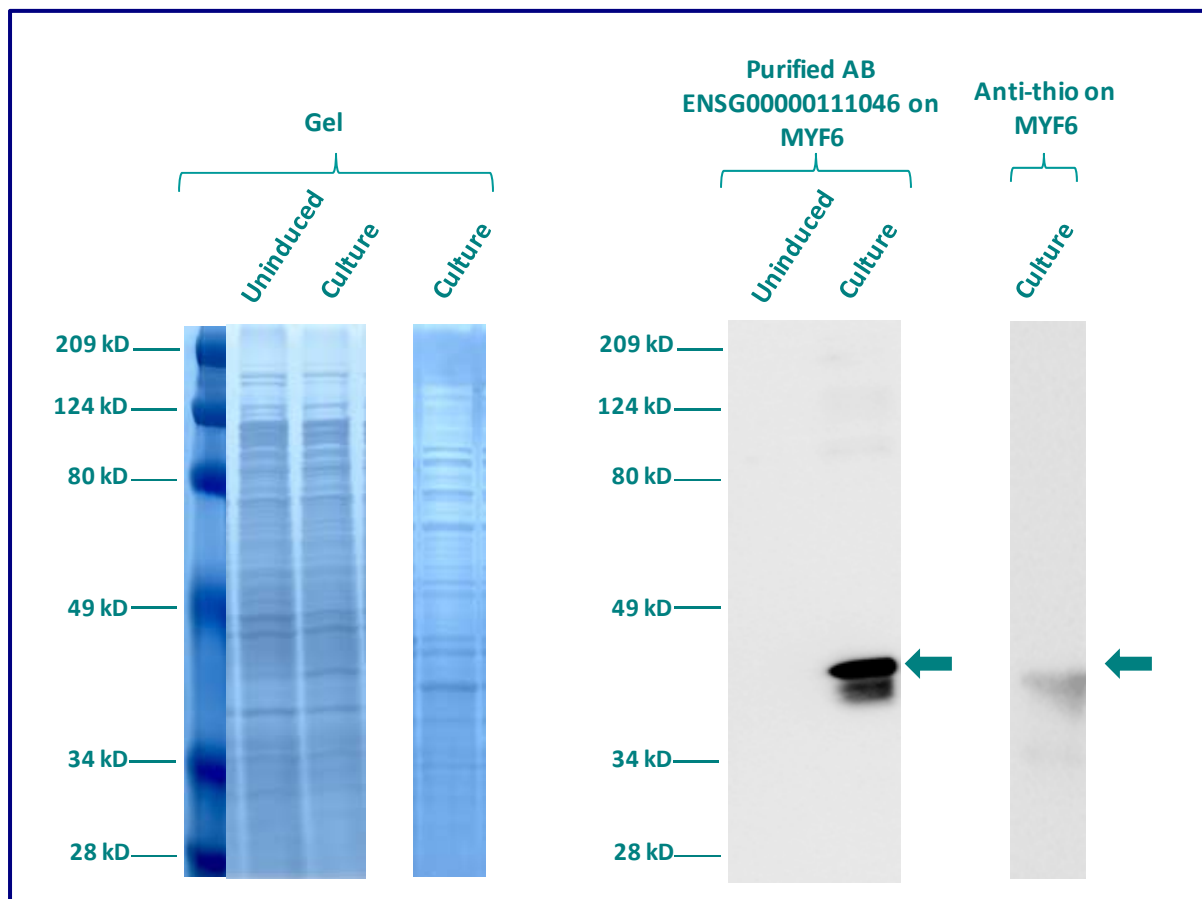
## WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000111046 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 MYF6 : 41kDa (27kDa + another 14kDa for the tag).



Gel concentration: 10%

Blocking: in 5% non-fat milk-PBST solution

1<sup>st</sup> Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000111046 at 1:5000
- Dilute the anti-thio at 1:5000

60 minutes of incubation

2<sup>nd</sup> Antibody: The antibody is diluted in blocking buffer.

- Dilute the anti-Rabbit IgG HRP conjugated at 1/1000
- 60 minutes of incubation

## IMMUNOFLUORESCENCE ANALYSIS

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Immunofluorescence analysis of Myogenic factor 6 (MYF6) expression in 4 cell lines (HELA, Capan-2, SH-SY5Y, Skin 3,44). The purified Antibody ENSG00000111046 has been tested at 1/5000.

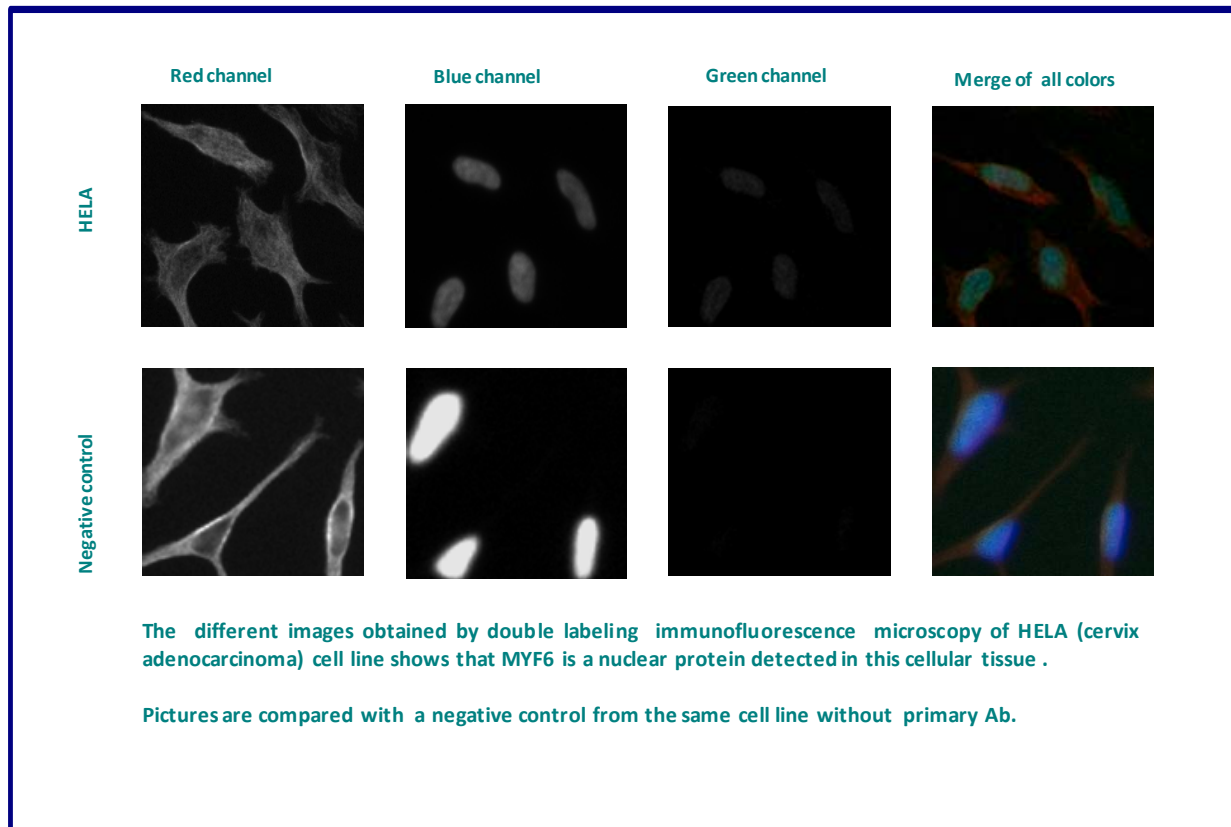
Red staining : cytoskeleton (microtubules/ $\alpha$ -tubuline)

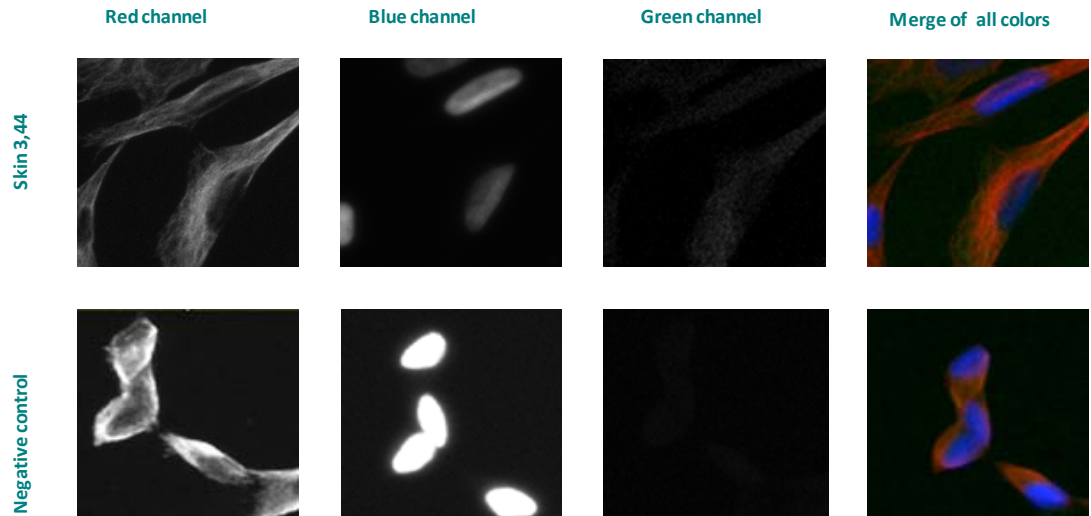
Blue staining : nucleus (Hoechst)

Green staining : anti- MYF6 antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Skeletal muscle





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that MYF6 is a 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 a cytoplasmic distribution.