

PRODUCT INFORMATION

Product name : MEF2D antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to MEF2D

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : MEF2D

Gene Name : myocyte enhancer factor 2D

Ensembl ID : ENSG00000116604

Entrez GeneID : 4209

GenBank Accession number : BC054520

Omim ID : 600663

Swiss-Prot : Q14814

Molecular weight of MEF2D : 55.9kDa

Function : Transcriptional activator which binds specifically to the MEF2 element, 5'-YTA[AT]4TAR-3', found in numerous muscle-specific, growth factor- and stress-induced genes. Mediates cellular functions not only in skeletal and cardiac muscle development, but also in neuronal differentiation and survival. Plays diverse roles in the control of cell growth, survival and apoptosis via p38 MAPK signaling in muscle-specific and/or growth factor-related transcription. Plays a critical role in the regulation of neuronal apoptosis

Expected subcellular localization : Nucleus.

Note: Translocated by HDAC4 to nuclear dots

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/1500 is determined. Appropriate specificity controls were run.
- **WB:** 1/700.
- **IF:** 1/500.

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, 50% glycerol containing a final concentration of 0.1% BSA and 0.01% Thimerosal.

Form : Liquid

Storage instruction : Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

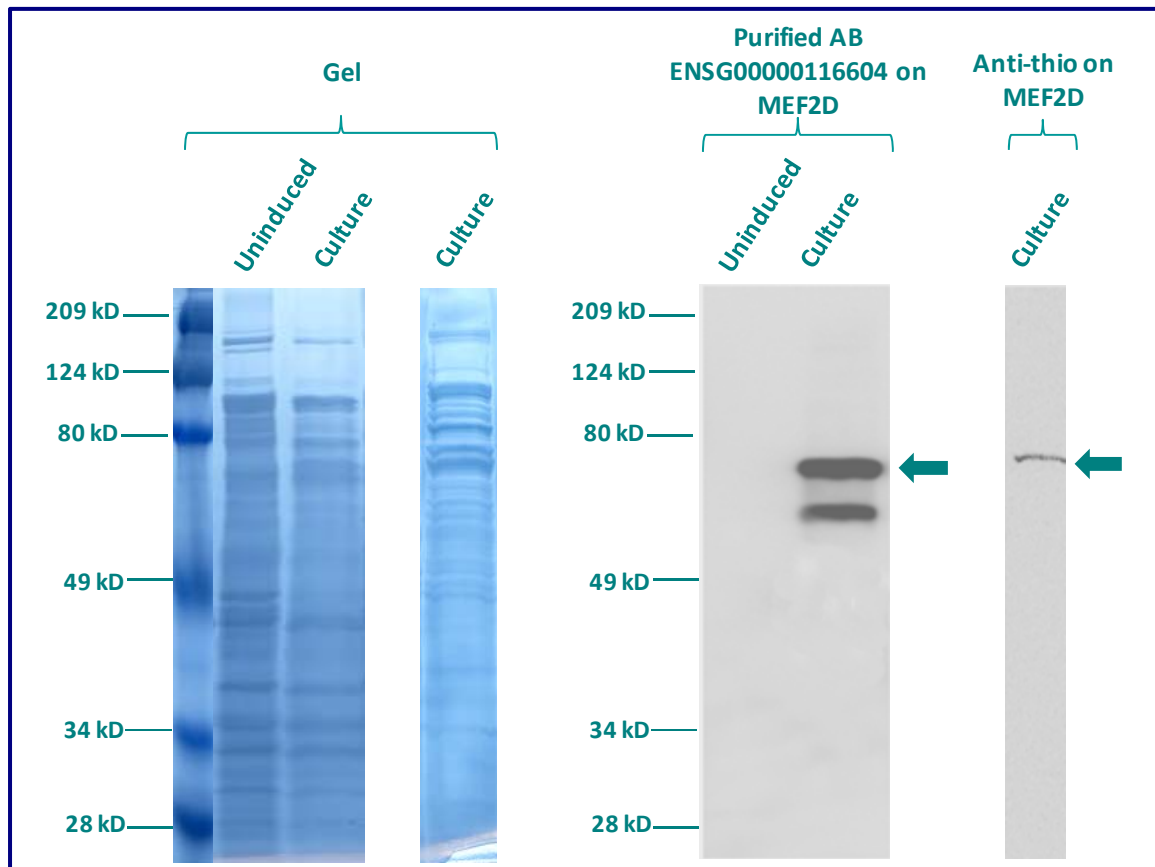
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000116604 has been tested at 1/1500 on uninduced culture (negative control) and on 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.

Plasmid name : pBAD-DEST49.

Molecular weight of MEF2D : 69.9kDa (55.9kDa + 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 ENSG00000116604 at 1: 700
- 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

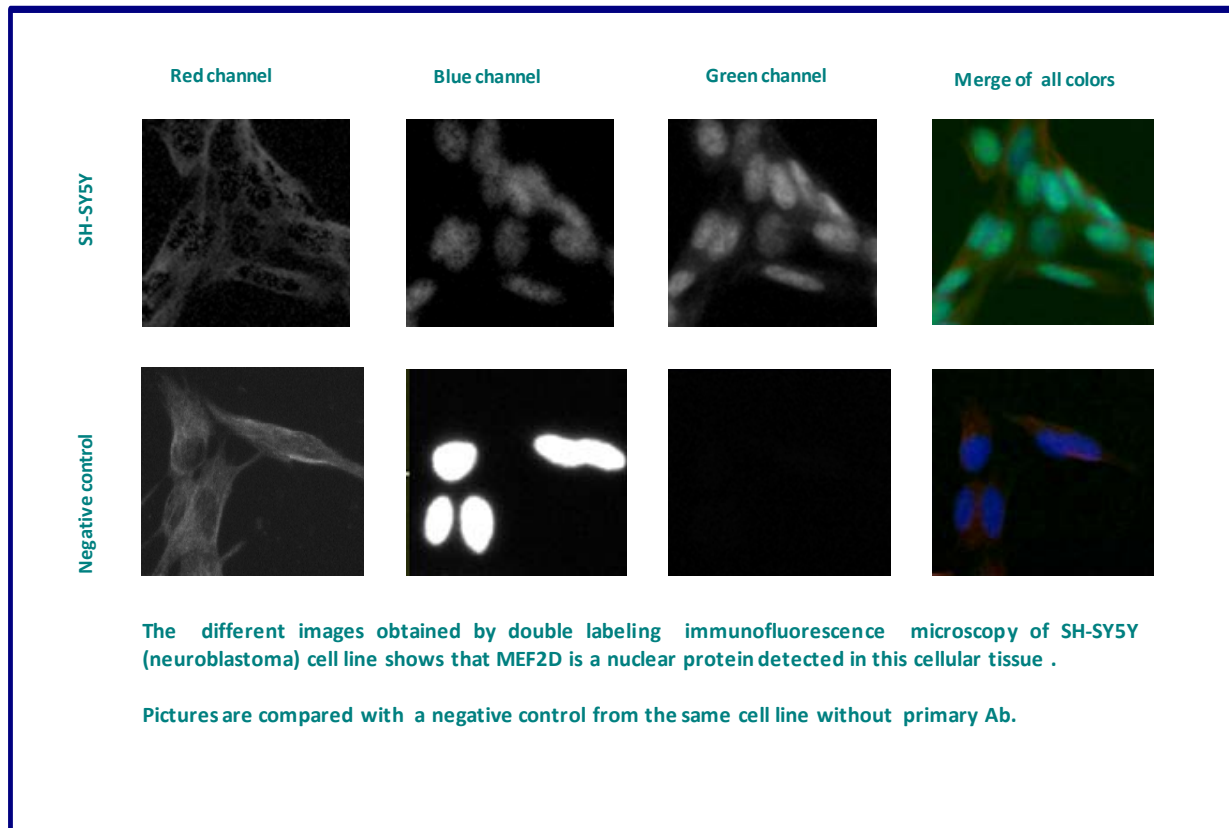
Immunofluorescence analysis of Myocyte-specific enhancer factor 2D (MEF2D) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, SKIN 3,44). The purified Antibody ENSG00000116604 has been tested at 1/1000.

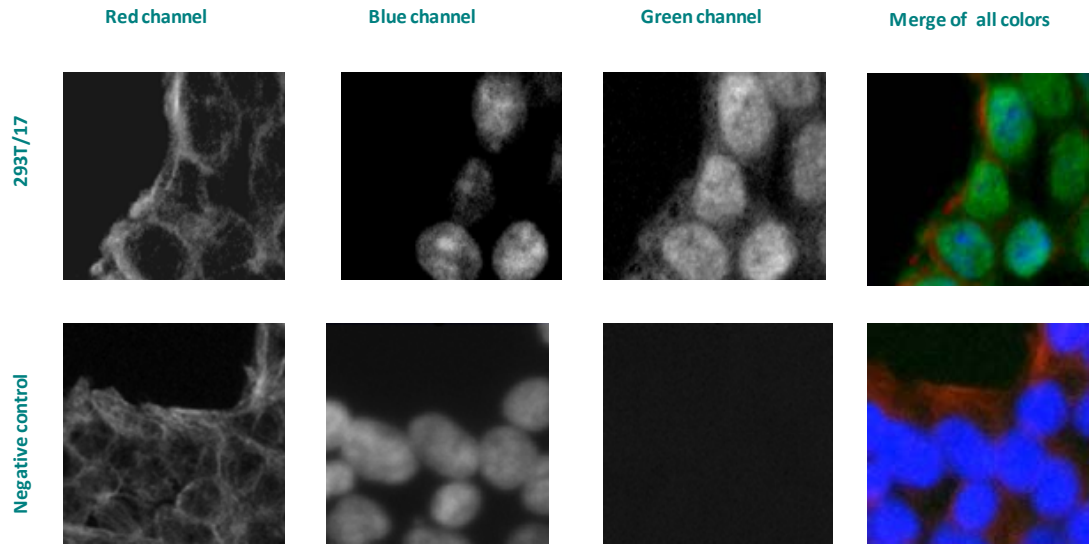
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- MEF2D antibody (purified)

Expected subcellular location : Nucleus. Note: Translocated by HDAC4 to nuclear dots





The different images obtained by double labeling immunofluorescence microscopy of 293T/17 (kidney embryonic) cell line shows that MEF2D 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 positive results with a nuclear distribution.