

PRODUCT INFORMATION

Product name : MEIS2 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to MEIS2

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : MEIS2

Gene Name : Meis homeobox 2

Ensembl ID : ENSG00000134138

Entrez GeneID : 4212

GenBank Accession number : AF017418

Omim ID : 601740

Swiss-Prot : O14770

Molecular weight of MEIS2 : 50.8 kDa [Isoform Meis2C], 43.8 kDa [Isoform Meis2A], 43.1 kDa [Isoform Meis2B], 51.1 kDa [Isoform Meis2D], 32.8 kDa [Isoform Meis2E]

Expected subcellular localization : Nucleus

Expected tissue specificity : Expressed in various tissues. In hematopoietic tissues, the lymphoid organs express high levels of MEIS2. Also expressed in some regions of the brain, such as the putamen.

Summary : This gene encodes a homeobox protein belonging to the TALE ('three amino acid loop extension') family of homeodomain-containing proteins. TALE homeobox proteins are highly conserved transcription regulators, and several members have been shown to be essential contributors to developmental programs. Multiple transcript variants encoding distinct isoforms have been described for this gene. [provided by RefSeq]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A titer of 1/9000 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

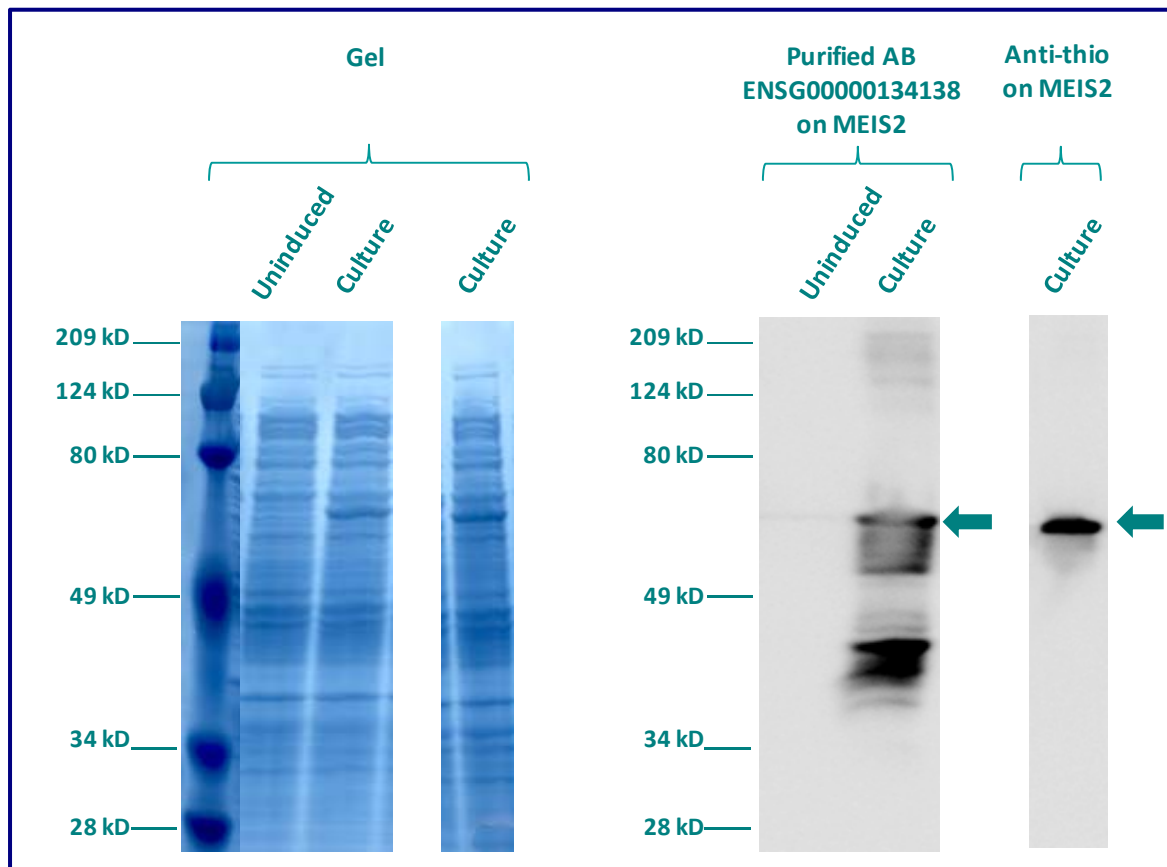
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000134138 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 MEIS2 : 64.8kDa (50.8kDa + 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 ENSG00000134138 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 1/10000

60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Homeobox protein Meis2 (MEIS2) expression in 4 cells lines (HELA, Capan-2, SH-SY5Y, Skin 3,44). The purified Antibody ENSG00000134138 has been tested at 1/5000.

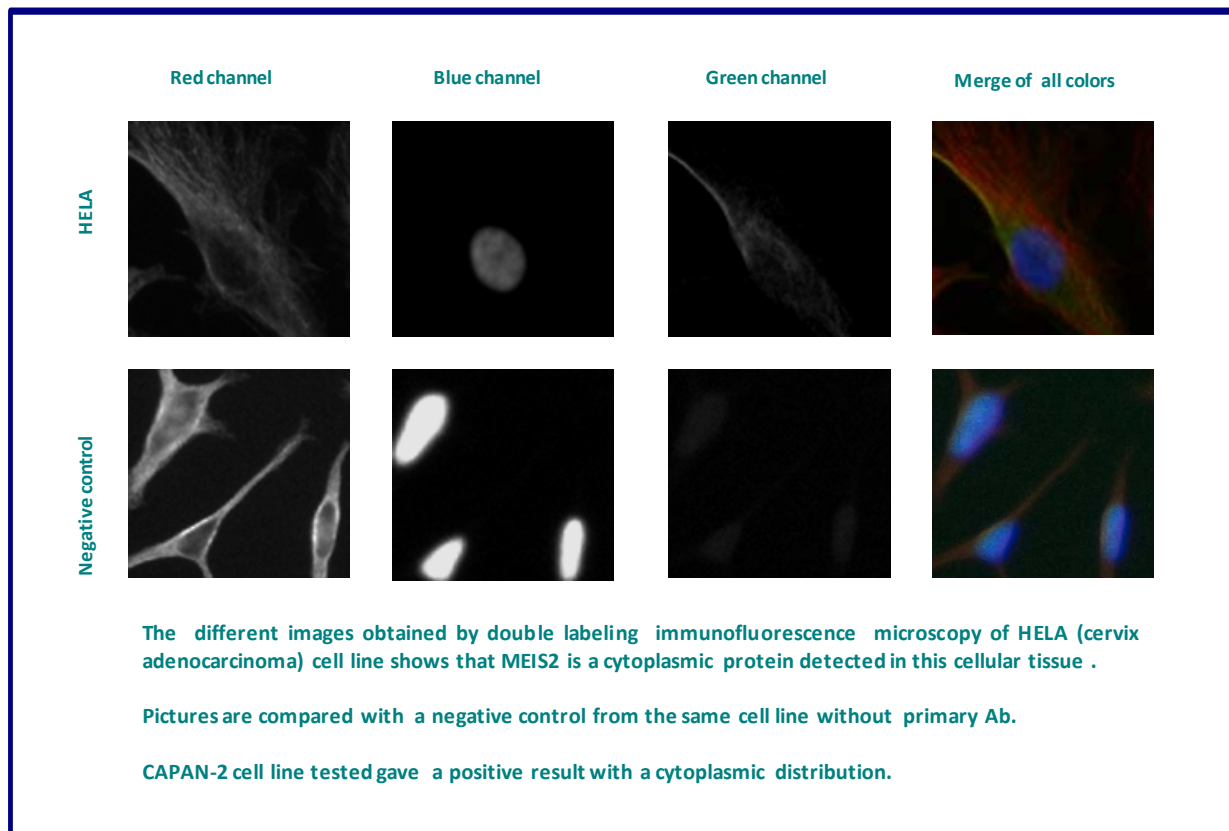
Red staining : cytoskeleton (microtubules/ α -tubuline)

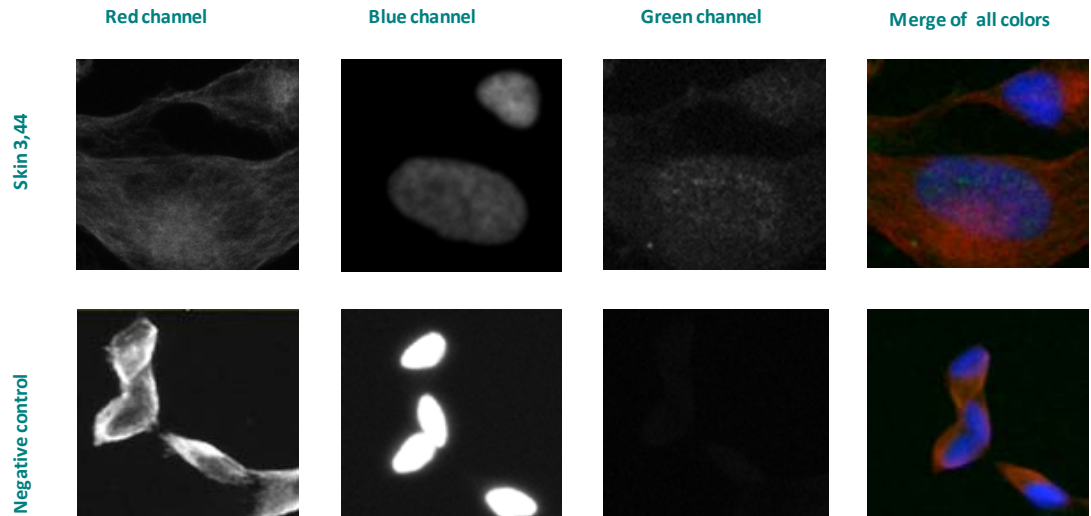
Blue staining : nucleus (Hoechst)

Green staining : anti- MEIS2 antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Expressed in various tissues. In hematopoietic tissues, the lymphoid organs express high levels of MEIS2. Also expressed in some regions of the brain, such as the putamen.





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that MEIS2 is a nuclear protein detected in this cellular tissue .

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

SH-SY5Y cell line tested gave a positive result with a nuclear distribution.

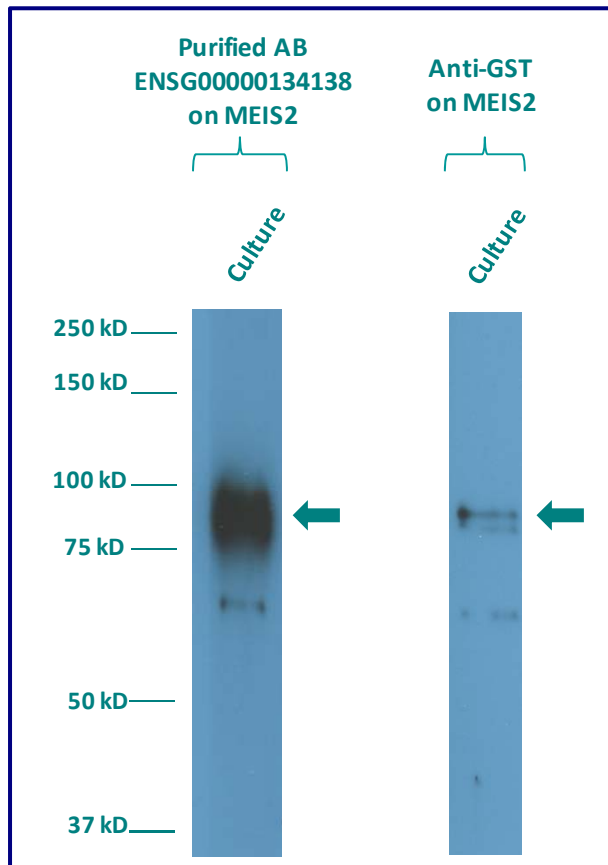
WESTERN BLOT ANALYSIS OF MOUSE RECOMBINANT PROTEIN MEIS2

The purified antibody ENSG00000134138 has been tested at 1/5000 on mouse recombinant protein.

An anti-GST has been tested as a positive control.

Plasmid name : pF3A-WG-GST.

Molecular weight of MEIS2 : 77.8kDa (51.8kDa + another 26kDa 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 ENSG00000134138 at 1:5000
- Dilute the anti-GST at 1:2000

60 minutes of incubation

2nd Antibody: The antibody is diluted in blocking buffer.

- Dilute the anti-Rabbit IgG HRP conjugated at 1/5000
- 60 minutes of incubation