

PRODUCT INFORMATION

Product name : SIX1 antibody

Product type : Primary antibodies

Description : Mouse monoclonal to SIX1

Immunogen : 1 synthetic peptide (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : SIX1

Gene Name : SIX homeobox 1

Ensembl ID : ENSG00000126778

Entrez GeneID : 6495

GenBank Accession number : X91868

Swiss-Prot : Q15475

Molecular weight : 32.2kDa

Function : May be involved in limb tendon and ligament development.

Expected subcellular localization : Nucleus.

Expected tissue specificity : Specifically expressed in skeletal muscle.

Summary : The protein encoded by this gene is a homeobox protein that is similar to the *Drosophila* 'sine oculis' gene product. This gene is found in a cluster of related genes on chromosome 14 and is thought to be involved in limb development. Defects in this gene are a cause of autosomal dominant deafness type 23 (DFNA23) and branchiootic syndrome type 3 (BOS3). [provided by RefSeq, Jul 2008]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 1 immunogen peptide. A titer of 500 has been determined. Appropriate specificity controls were run.
- **WB:** Dilution 1/5000
- **IF:** Dilution 1/50

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

Raised in : Mouse

Clonality : Monoclonal

Isotype : IgG

Purity : Purified Antibody

Concentration: 2mg/ml

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

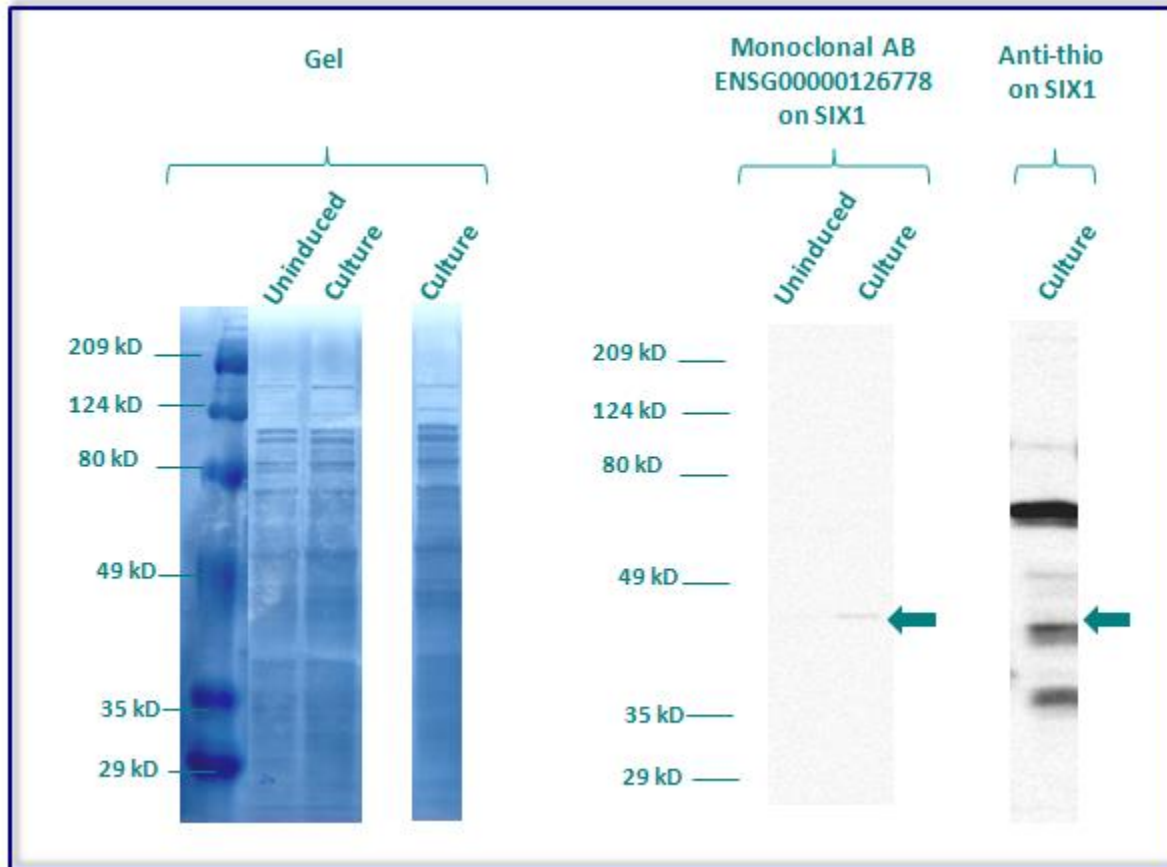
The monoclonal purified antibody ENSG00000126778 has tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

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 : 1D2G8G5, Isotype : G1

Plasmid name : pBAD-DEST49.

Molecular weight of SIX1 : 46.2kDa (32.2kDa + another 14kDa for the tag).



NOTE: THE PURIFIED MONOCLONAL ANTIBODY DOES NOT DETECT THE PROTEIN IN THE FOLLOWING CELL LYSATES (HeLa, SAOS 2, SH-SY5Y, SKIN 3.44 & 293T17) AT A DILUTION OF 1:250.

Gel concentration: 10%

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

1st Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000126778 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-Mouse IgG HRP conjugated at 1/10000

60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Homeobox protein SIX1 (SIX1) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The monoclonal antibody ENSG00000126778 has been tested at 1/50.

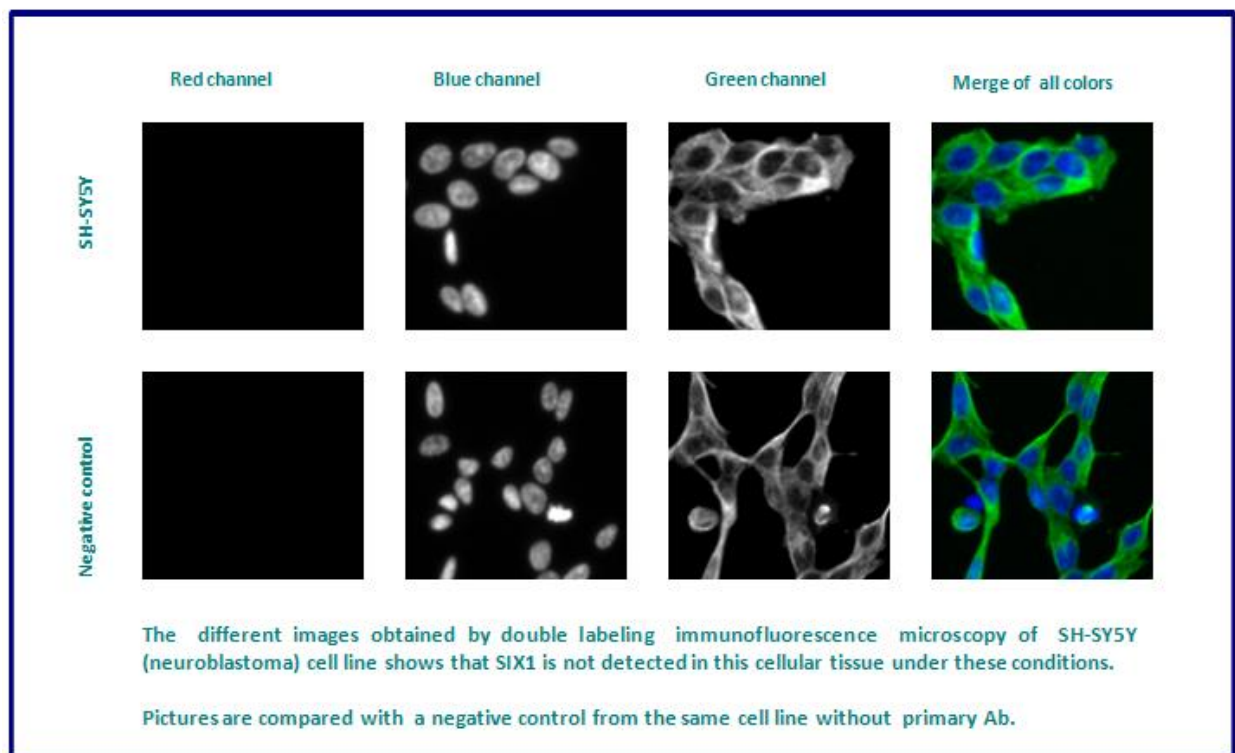
Green staining : cytoskeleton (microtubules/ α -tubuline)

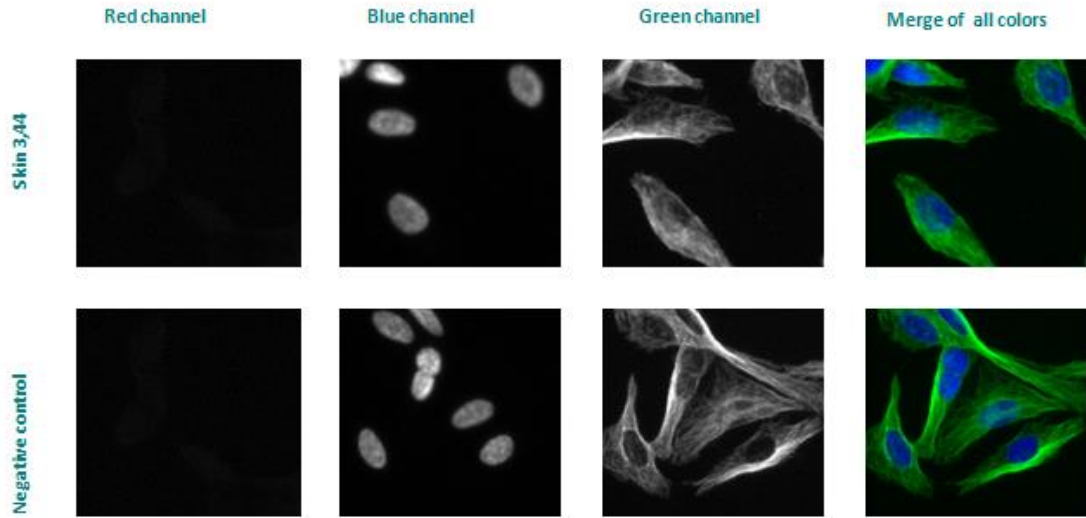
Blue staining : nucleus (Hoechst)

Red staining : anti- SIX1 antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Specifically expressed in skeletal muscle





The different images obtained by double labeling immunofluorescence microscopy of Skin 3,44 (melanoma) cell line shows that SIX1 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 cell lines tested gave a negative results under these conditions.