

PRODUCT INFORMATION

Product name : SNAI1 antibody

Product type : Primary antibodies

Description : Mouse monoclonal to SNAI1

Immunogen : 1 synthetic peptide (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : SNAI1

Gene Name : snail homolog 1 (Drosophila)

Ensembl ID : ENSG00000124216

Entrez GeneID : 6615

GenBank Accession number : AF125377

Swiss-Prot : O95863

Molecular weight : 29.1kDa

Function : Involved in the epithelial to mesenchymal transition (EMT) and formation and maintenance of embryonic mesoderm. Binds to 3 E-boxes of the E-cadherin gene promoter and represses its transcription.

Expected subcellular localization : Nucleus. Cytoplasm. Note: Once phosphorylated (probably on Ser-107, Ser-111, Ser-115 and Ser-119) it is exported from the nucleus to the cytoplasm where subsequent phosphorylation of the destruction motif and ubiquitination involving BTRC occurs.

Expected tissue specificity : Expressed in a variety of tissues with the highest expression in kidney. Expressed in mesenchymal and epithelial cell lines.

Summary : The Drosophila embryonic protein snail is a zinc finger transcriptional repressor which downregulates the expression of ectodermal genes within the mesoderm. The nuclear protein encoded by this gene is structurally similar to the Drosophila snail protein, and is also thought to be critical for mesoderm formation in the developing embryo. At least two variants of a similar processed pseudogene have been found on chromosome 2. [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 12500 has been determined. Appropriate specificity controls were run.
- **WB:** Dilution 1/10000
- **IF:** Dilution 1/500

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

Raised in : Mouse

Clonality : Monoclonal

Isotype : IgG

Purity : Purified Antibody

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

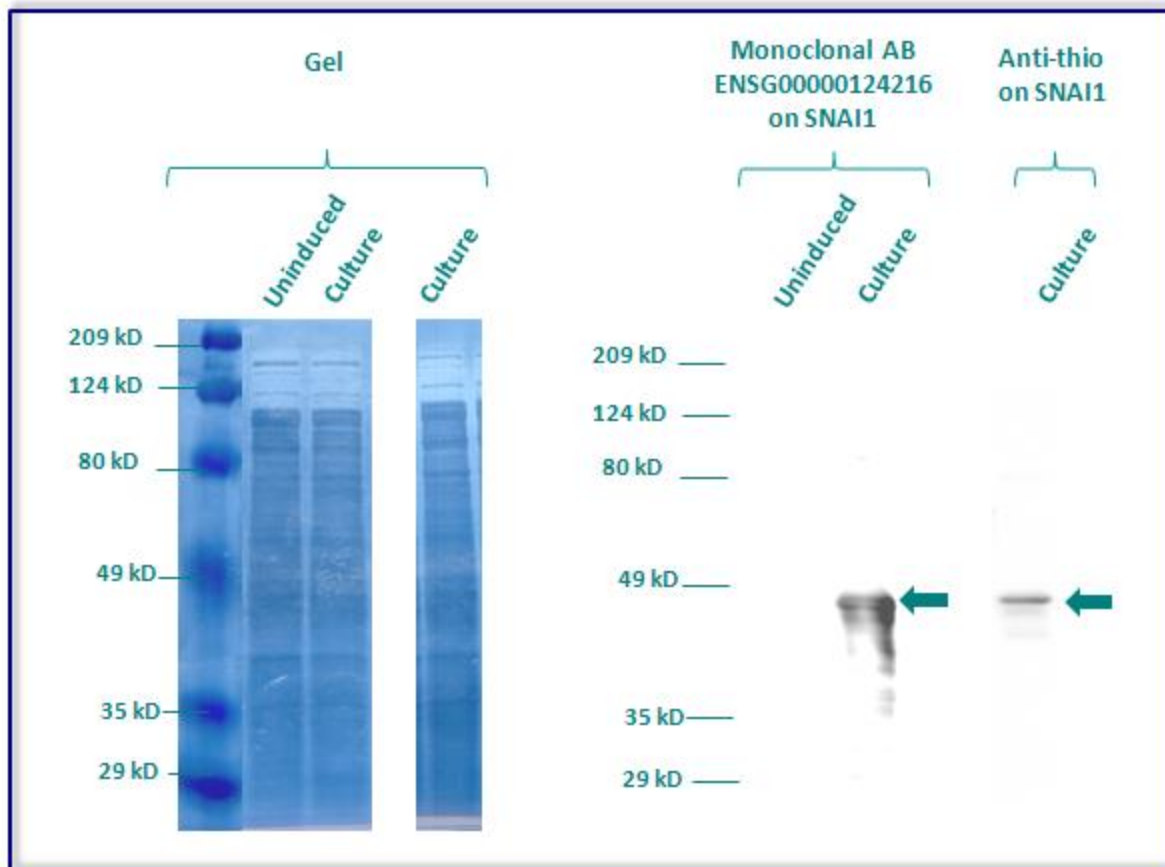
The monoclonal purified antibody ENSG00000124216 has tested at 1/10000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

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 : 7H1B10C6, Isotype : G1; kappa

Plasmid name : pBAD-DEST49.

Molecular weight of SNAI1 : 43.1kDa (29.1kDa + 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 ENSG00000124216 at 1:10000
- 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 Zinc finger protein SNAI1 (SNAI1) expression in 2 cells lines (HELA, Capan-2). The monoclonal antibody ENSG00000124216 has been tested at 1/500.

Green staining : cytoskeleton (microtubules/ α -tubuline)

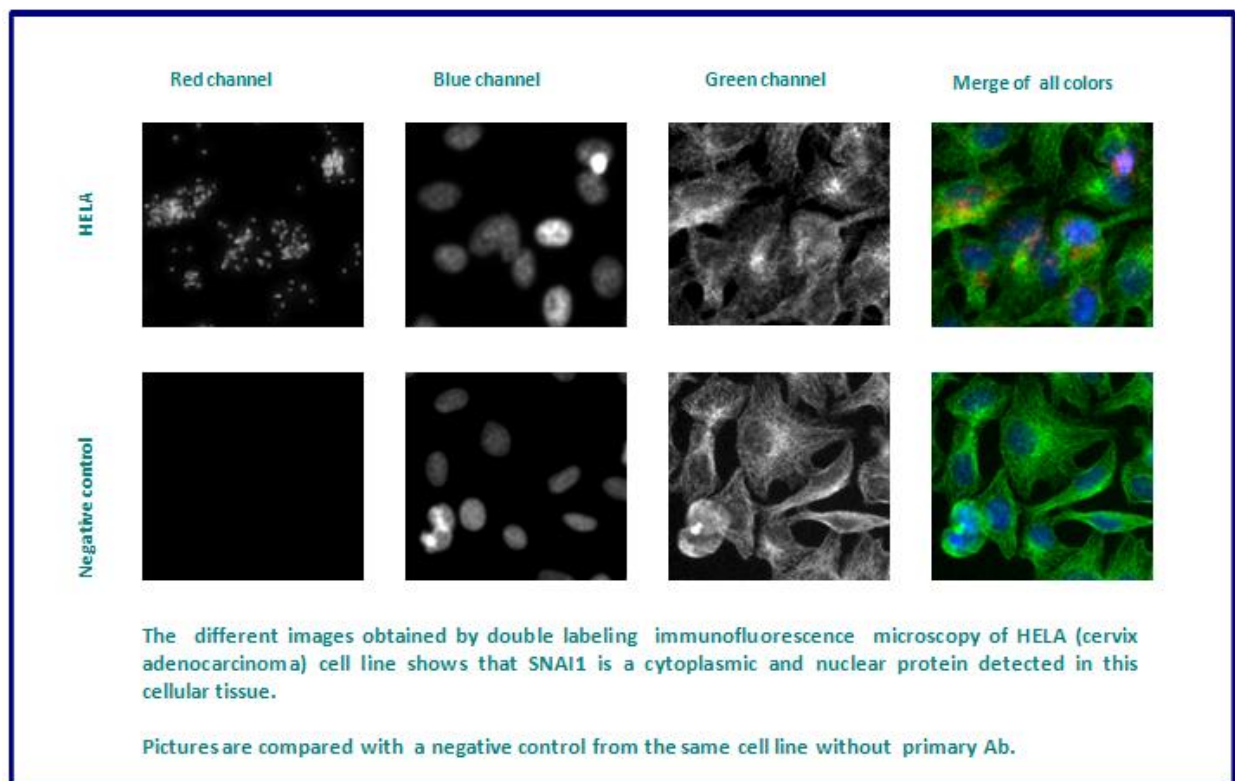
Blue staining : nucleus (Hoechst)

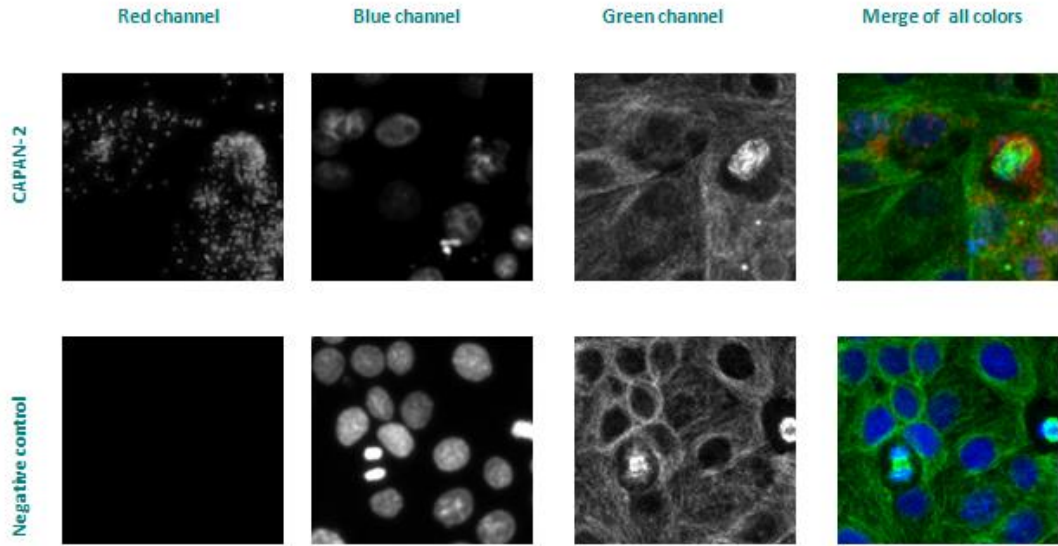
Red staining : anti- SNAI1 antibody (purified)

Expected subcellular location : Nucleus. Cytoplasm.

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Expected tissue specificity : Expressed in a variety of tissues with the highest expression in kidney. Expressed in mesenchymal and epithelial cell lines





The different images obtained by double labeling immunofluorescence microscopy of CAPAN-2 (Pancreas adenocarcinoma) cell line shows that SNAI1 is a cytoplasmic and nuclear protein detected in this cellular tissue.

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