

PRODUCT INFORMATION

Product name : LHX2 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to LHX2

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : LHX2

Gene Name : LIM homeobox 2

Ensembl ID : ENSG00000106689

Entrez GeneID : 9355

GenBank Accession number : U11701

Omim ID : 603759

Swiss-Prot : P50458

Molecular weight of LHX2 : 44.3kDa

Function : Acts as a transcriptional activator. Stimulates the promoter of the alpha-glycoprotein gene. Transcriptional regulatory protein involved in the control of cell differentiation in developing lymphoid and neural cell types

Expected subcellular localization : Nucleus

Summary : This gene encodes a protein belonging to a large protein family, members of which carry the LIM domain, a unique cysteine-rich zinc-binding domain. The encoded protein may function as a transcriptional regulator. The protein can recapitulate or rescue phenotypes in *Drosophila* caused by a related protein, suggesting conservation of function during evolution. [provided by RefSeq, Jul 2008]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/178000 is determined. Appropriate specificity controls were run.
- **WB:** 1/500.
- **IF:** 1/100.

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

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Crude serum, Final bleed

Storage buffer : 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.

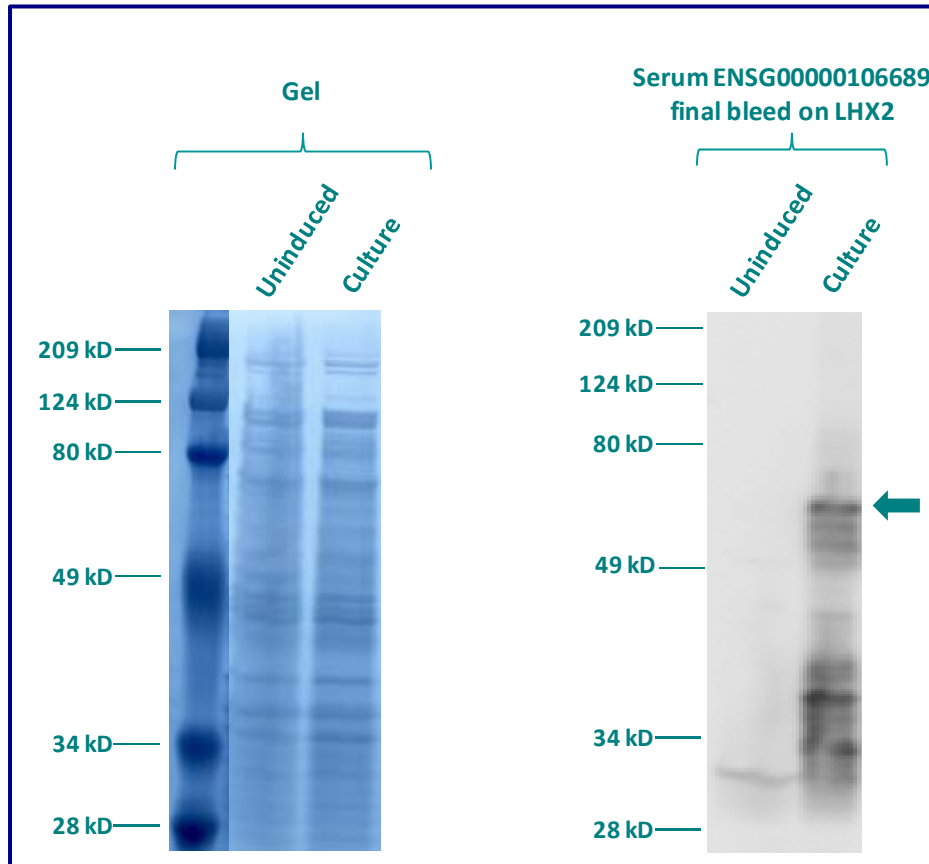
WESTERN BLOT ON RECOMBINANT PROTEIN

The serum ENSG00000106689 has been tested at 1/1000 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.

Plasmid name : pBAD-DEST49.

Molecular weight of LHX2 : 58.4kDa (44.4kDa + 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 crude serum ENSG00000106689 at 1: 500
 - 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

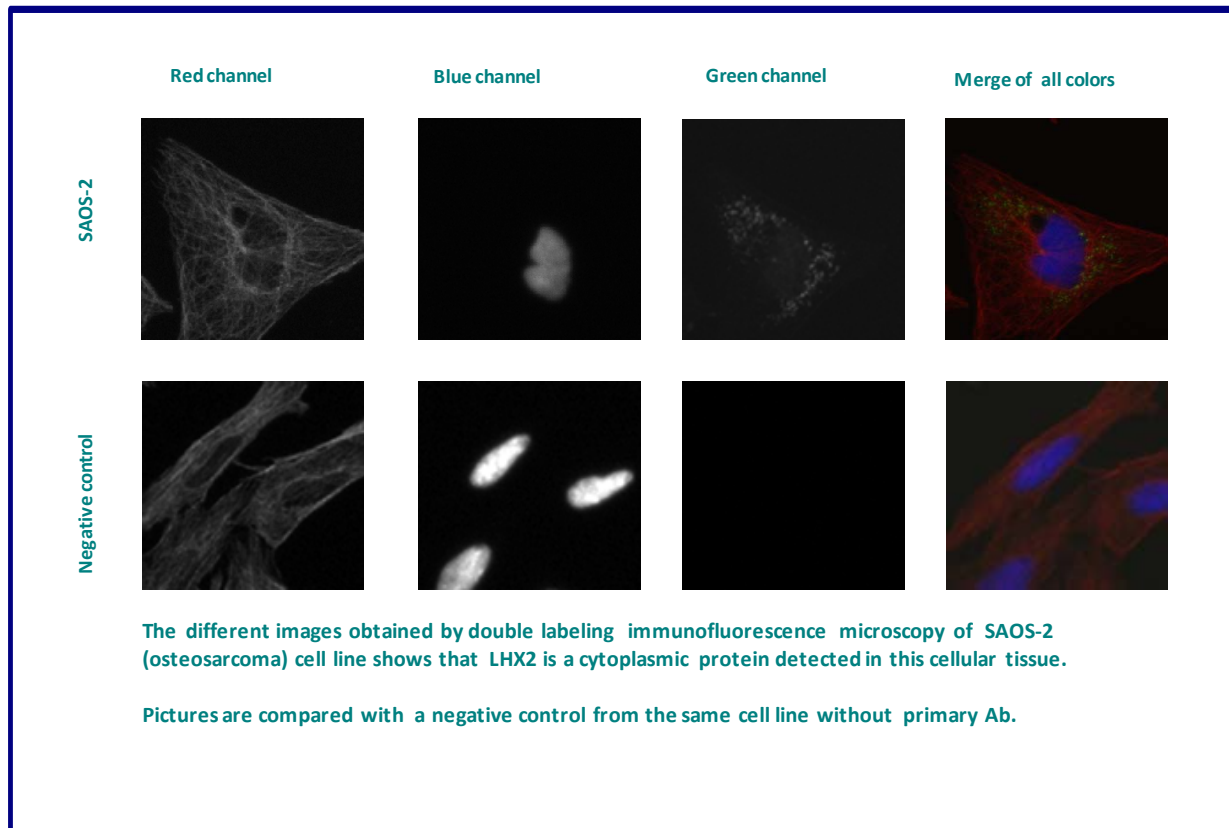
Immunofluorescence analysis of LIM/homeobox protein Lhx2 (LHX2) expression in 5 cell lines (HELA, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The crude serum ENSG00000106689 has been tested at 1/500.

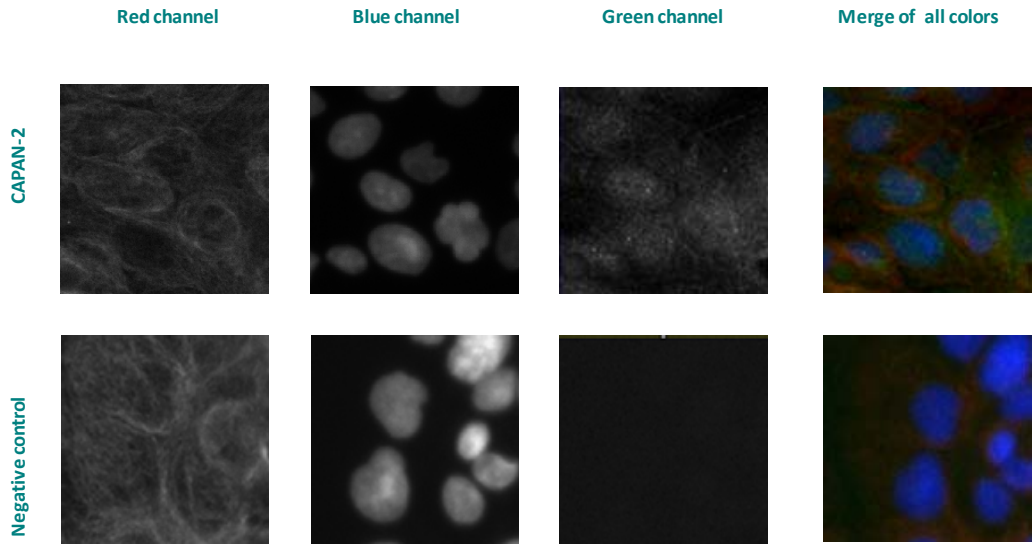
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- LHX2 antibody

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of CAPAN- 2 (Pancreas adenocarcinoma) cell line shows that LHX2 is a nuclear and 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 nuclear and cytoplasmic distribution.