

PRODUCT INFORMATION

Product name : ALX4 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to ALX4

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA , WB and IF

GENE INFORMATION

Gene Symbol : ALX4

Gene Name : aristaless-like homeobox 4

Ensembl ID : ENSG00000052850

Entrez GeneID : 60529

GenBank Accession number : AF294629

Omim ID : 605420

Swiss-Prot : Q9H161

Molecular weight of ALX4: 44.1kDa

Function : Transcription factor involved in skull and limb development. Plays an essential role in craniofacial development, skin and hair follicle development.

Expected subcellular localization : Nucleus

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/ 14000 is 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.

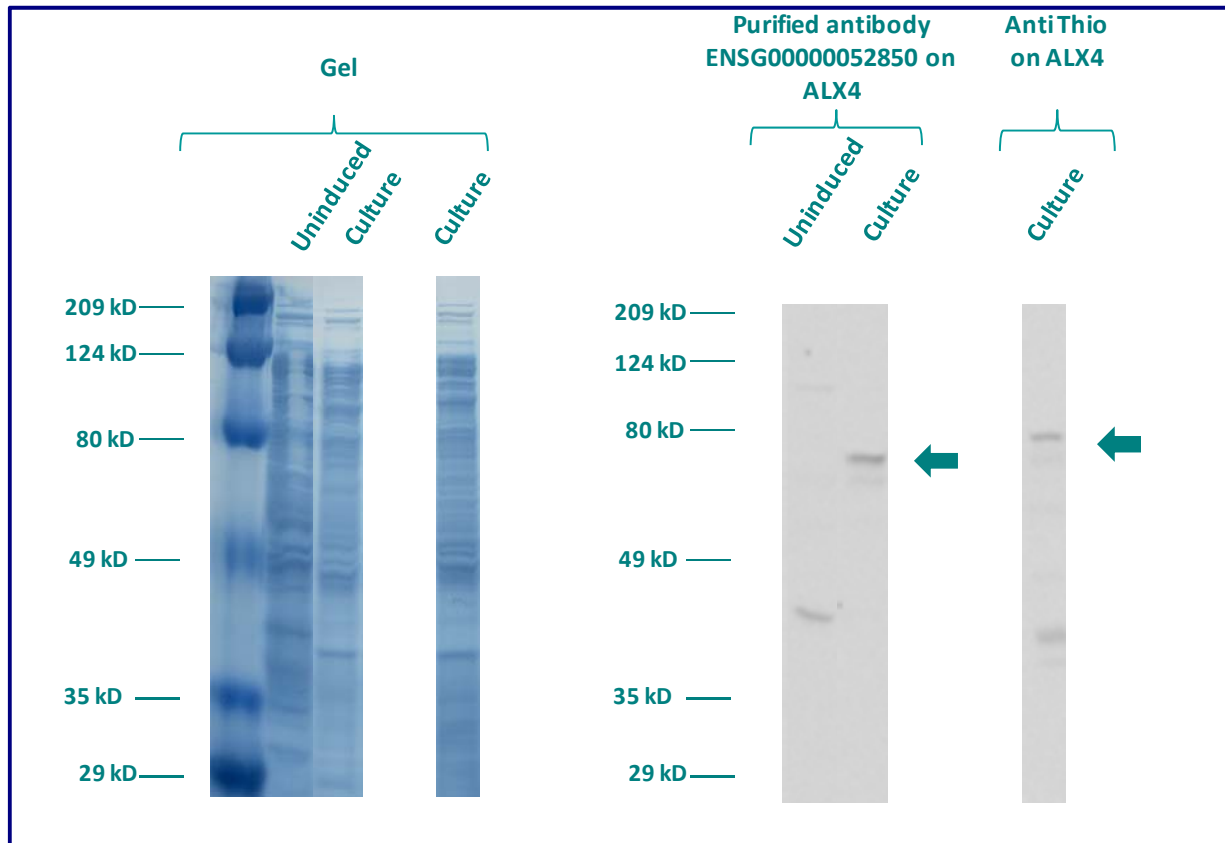
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000052850 has been tested at 1/10000 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 ALX4 : 58.1kDa (44.1kDa + 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 ENSG00000052850 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 aristaless-like (ALX4) expression in 3 cells lines (293T/17, SAOS-2, SH-SY5Y). The purified Antibody ENSG00000052850 has been tested at 1/5000.

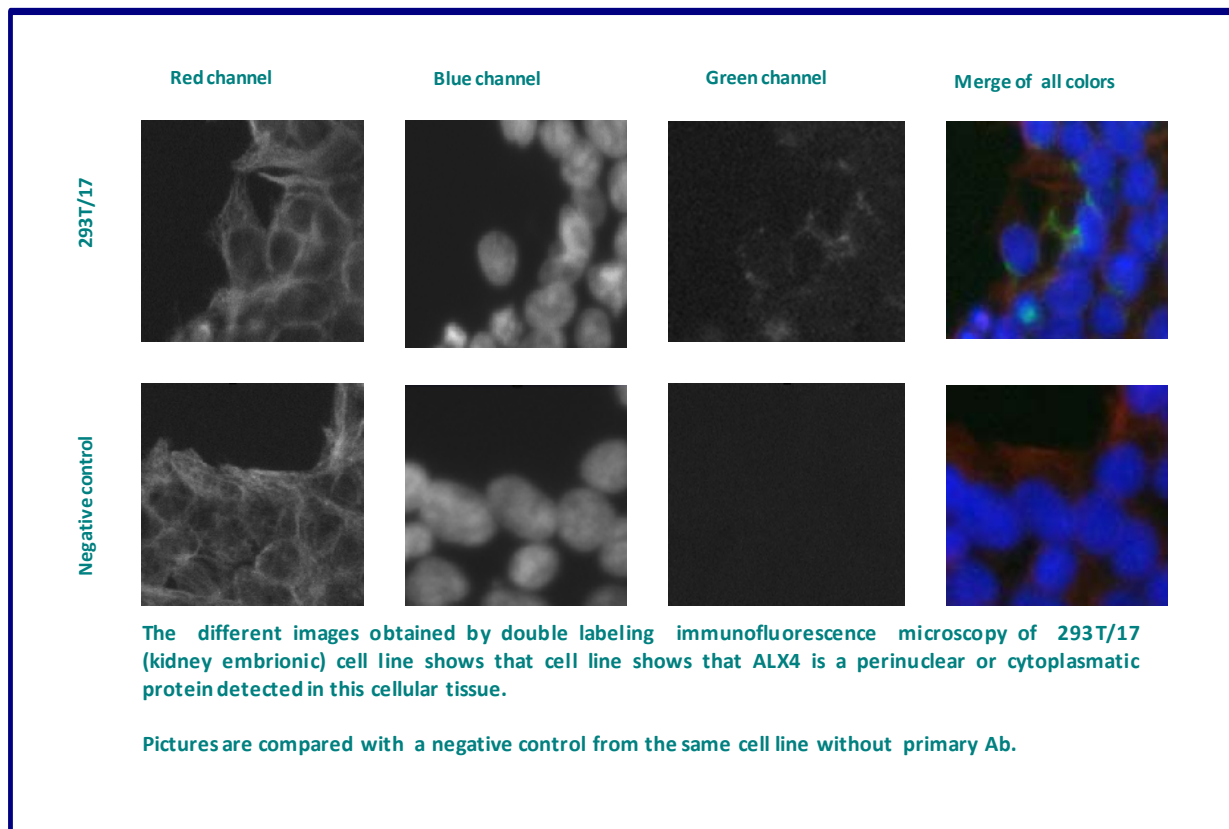
Red staining : cytoskeleton (microtubules/ α -tubuline)

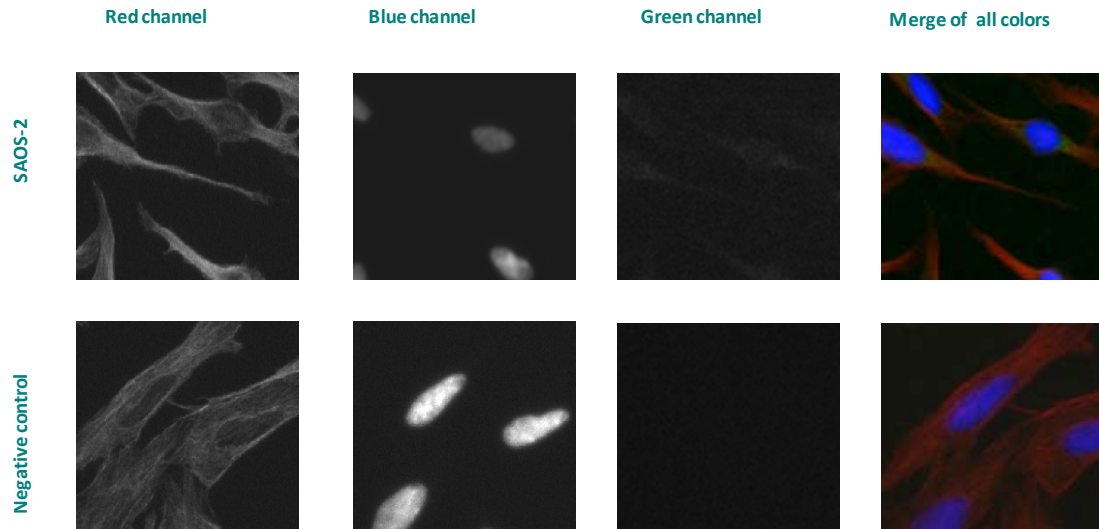
Blue staining : nucleus (Hoechst)

Green staining : anti- ALX4 antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Expression is likely to be restricted to bone. Found in parietal bone.





The merge of staining obtained by double labeling immunofluorescence microscopy of SAOS-2 (osteosarcoma) cell line shows that cell line shows that ALX4 is a perinuclear or 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 results with the same distribution