

PRODUCT INFORMATION

Product name : ARX antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to ARX

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : ARX

Gene Name : aristaless related homeobox

Ensembl ID : ENSG00000004848

Entrez GeneID : 170302

GenBank Accession number : AY038071

Omim ID : 300382

Swiss-Prot : Q96QS3

Molecular weight of ARX: 58.2kDa

Function : Transcription factor required for normal brain development. May be important for maintenance of specific neuronal subtypes in the cerebral cortex and axonal guidance in the floor plate.

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/ 3000 is determined. Appropriate specificity controls were run.
- **WB:** 1/1500.
- **IF:** 1/500.

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.

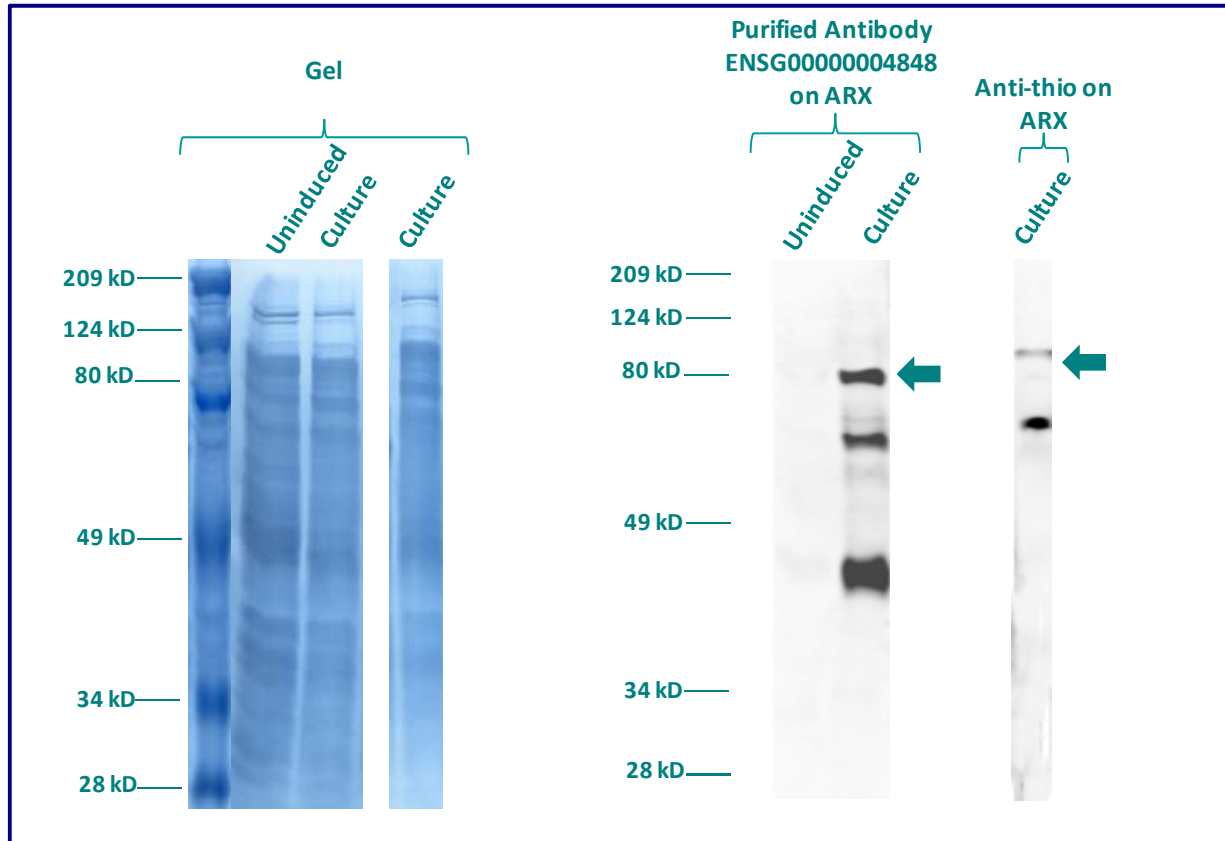
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000004848 has been tested at 1/3000 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 ARX : 72.2 (58.2 + 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 ENSG00000004848 at 1: 1500
- 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 ARX (ARX) expression in 5 cells lines (293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3.44). The purified Antibody ENSG00000004848 has been tested at 1/1000.

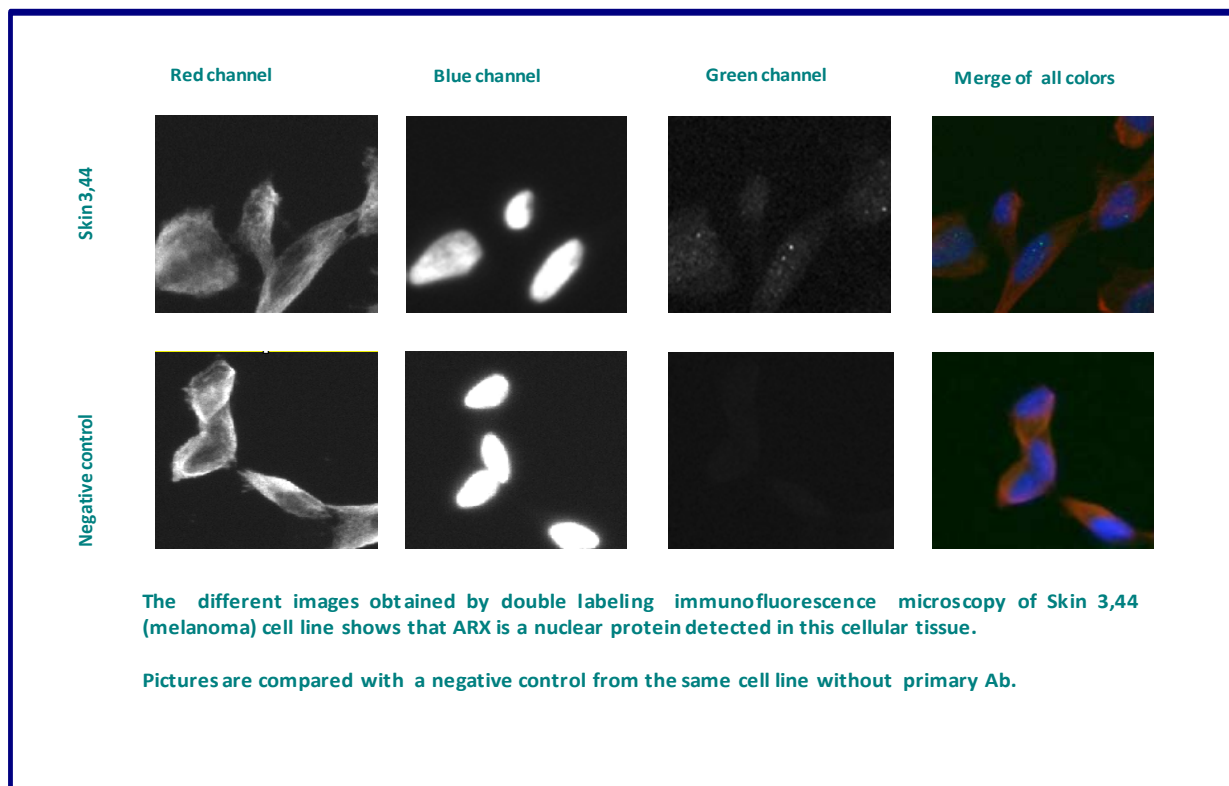
Red staining : cytoskeleton (microtubules/ α -tubuline)

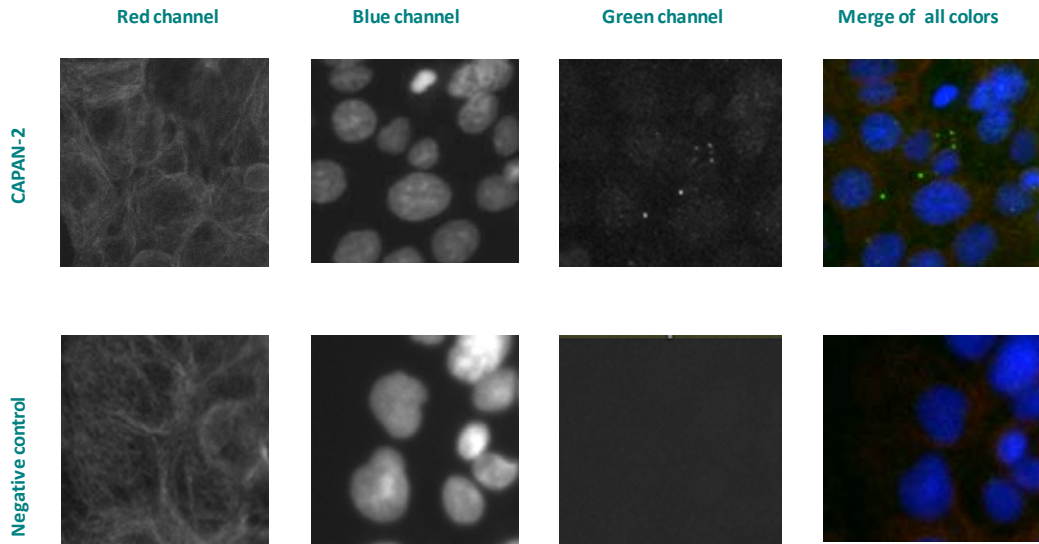
Blue staining : nucleus (Hoechst)

Green staining : anti- ARX antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Expressed predominantly in fetal and adult brain and skeletal muscle. Expression is specific to the telencephalon and ventral thalamus. There is an absence of expression in the cerebellum throughout development and also in adult.





The different images obtained by double labeling immunofluorescence microscopy of CAPAN- 2 (Pancreas adenocarcinoma) cell line shows that ARX is a nuclear 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 the same distribution