

PRODUCT INFORMATION

Product name : DLX2 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to DLX2

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : DLX2

Gene Name : distal-less homeobox 2

Ensembl ID : ENSG00000115844

Entrez GeneID : 1746

GenBank Accession number : U51003

Omim ID : 126255

Swiss-Prot : Q07687

Molecular weight of DLX2 : 34.2kDa

Function : Likely to play a regulatory role in the development of the ventral forebrain. May play a role in craniofacial patterning and morphogenesis.

Expected subcellular localization : Nucleus.

Summary : Many vertebrate homeo box-containing genes have been identified on the basis of their sequence similarity with *Drosophila* developmental genes. Members of the *Dlx* gene family contain a homeobox that is related to that of *Distal-less (Dll)*, a gene expressed in the head and limbs of the developing fruit fly. The *Distal-less (Dlx)* family of genes comprises at least 6 different members, *DLX1-DLX6*. The *DLX* proteins are postulated to play a role in forebrain and craniofacial development. This gene is located in a tail-to-tail configuration with another member of the gene family on the long arm of chromosome 2. [provided by RefSeq]

APPLICATION NOTE

Recommended dilution :

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

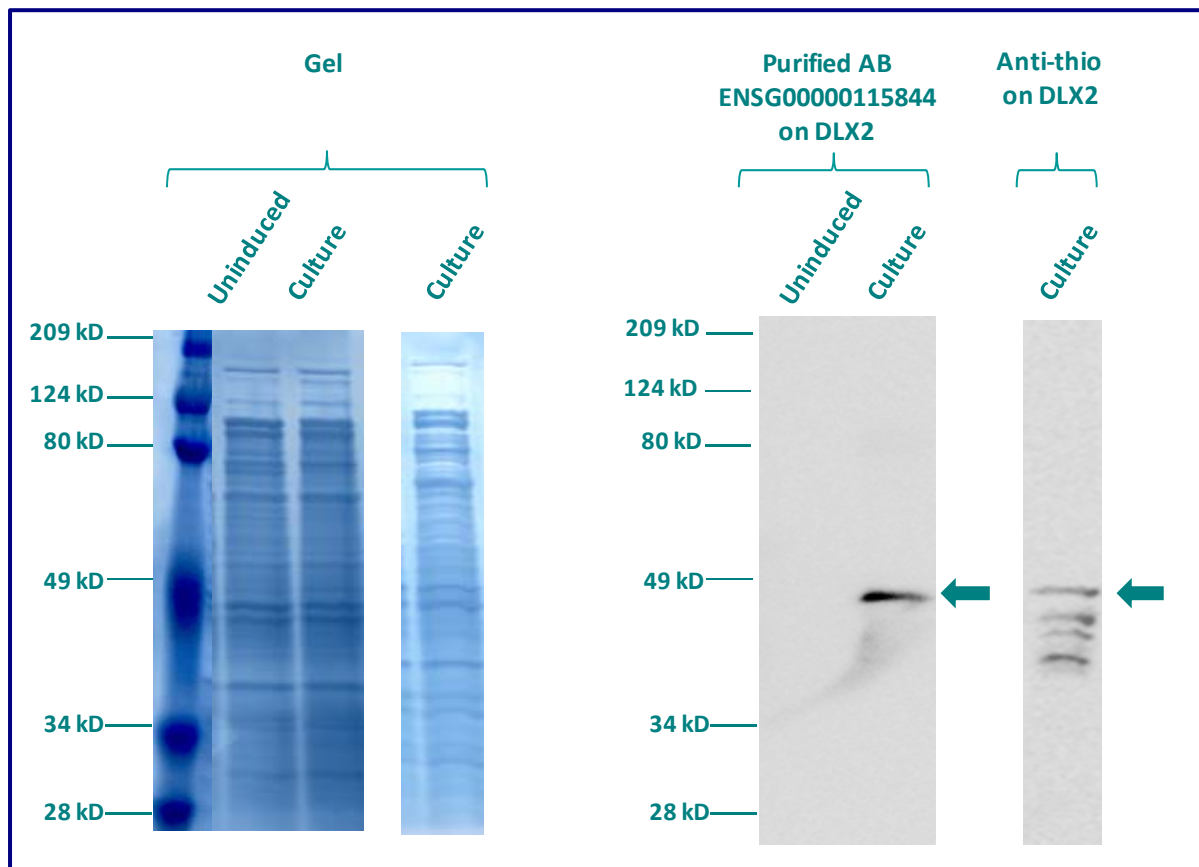
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000115844 has been tested at 1/5000 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 DXL2 : 48.2kDa (34.2kDa + 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 ENSG00000115844 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 1/1000
- 60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

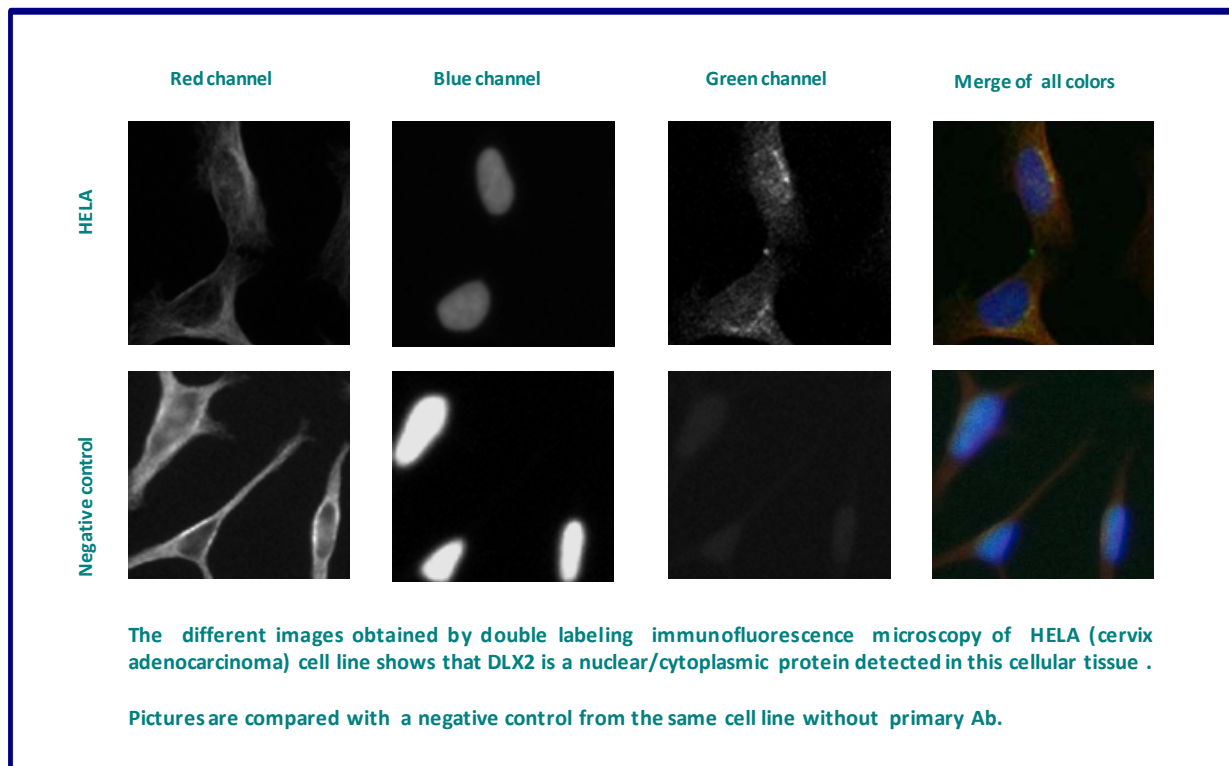
Immunofluorescence analysis of Homeobox protein DLX-2 (DLX2) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS2, SH-SY5Y, Skin 3.44). The purified Antibody ENSG00000115844 has been tested at 1/5000.

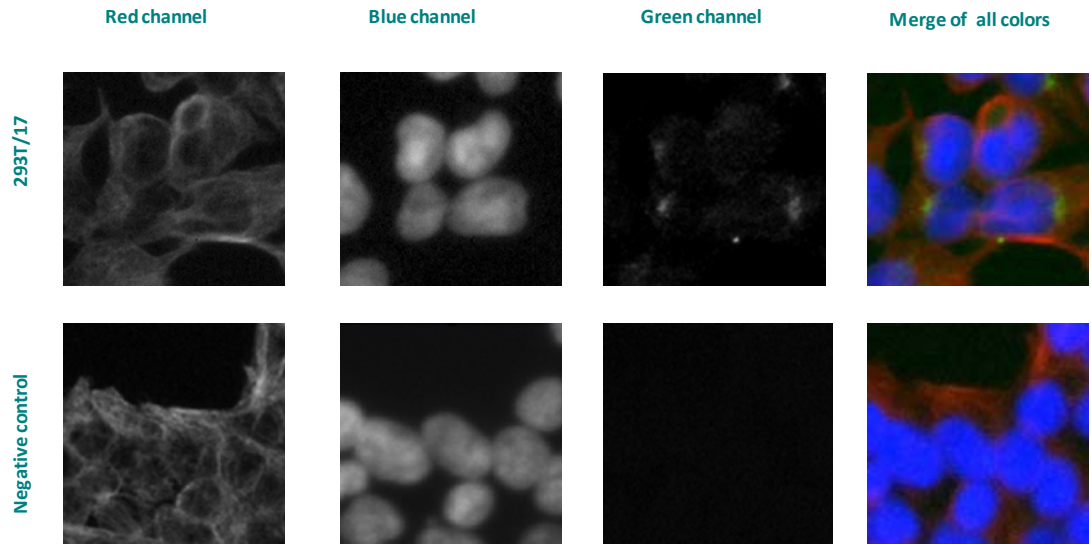
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- DLX2 antibody (purified)

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of 293T/17 (kidney embryonic) cell line shows that DLX2 is a nuclear/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 a nuclear/cytoplasmic distribution.