

PRODUCT INFORMATION

Product name : GBX2 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to GBX2

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : GBX2

Gene Name : gastrulation brain homeobox 2

Ensembl ID : ENSG00000168505

Entrez GeneID : 2637

GenBank Accession number : AF118452

Omim ID : 601135

Swiss-Prot : P52951

Molecular weight of GBX2 : 37.3kDa

Function : May act as a transcription factor for cell pluripotency and differentiation in the embryo

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 1/4000 is determined. Appropriate specificity controls were run.
- **WB:** 1/2000.
- **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, 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.

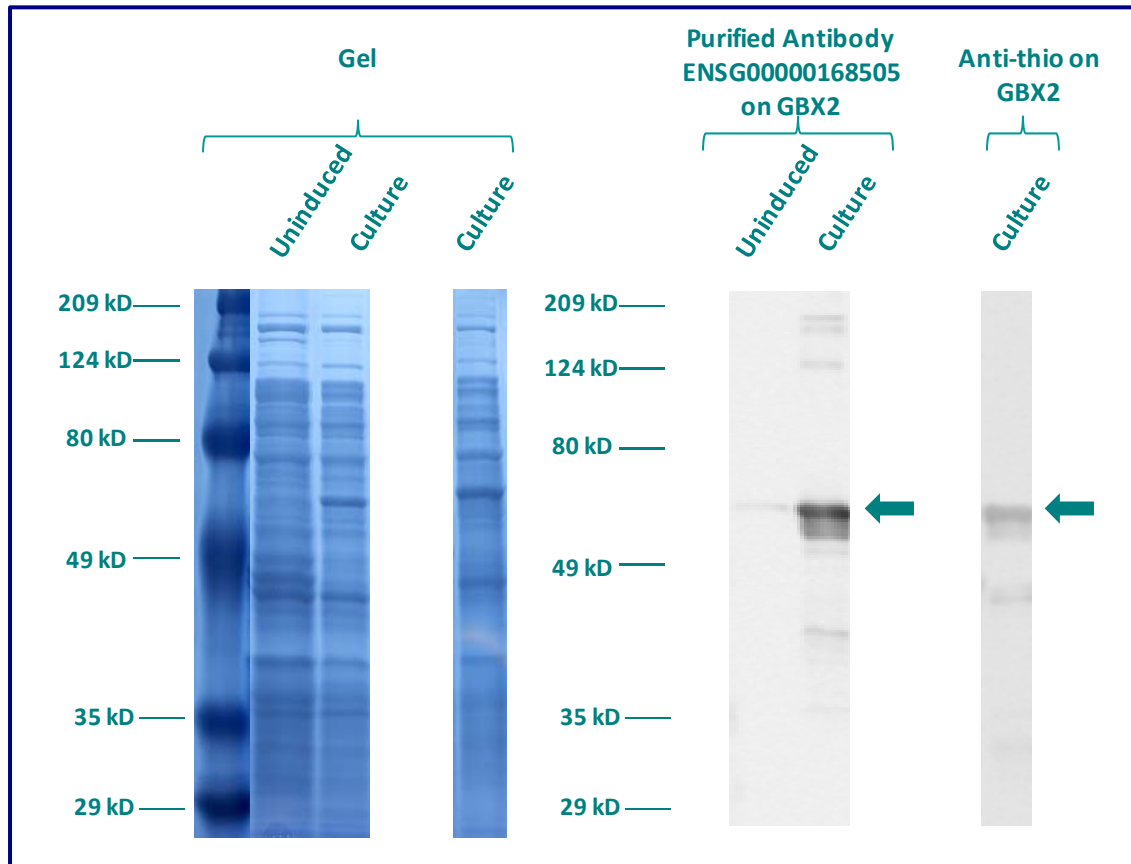
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000168505 has been tested at 1/5000 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 GBX2 : 51kDa (37kDa + 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 ENSG00000168505 at 1: 2000
- 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

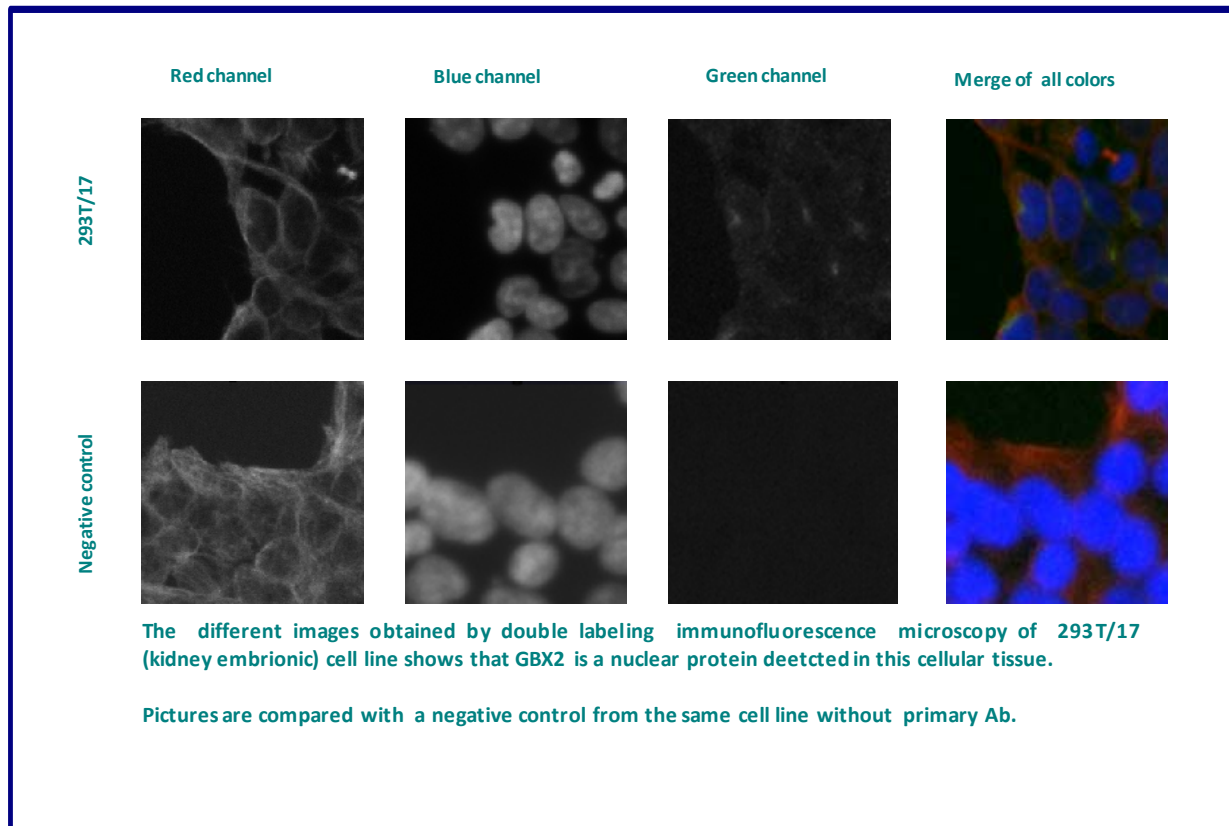
Immunofluorescence analysis of Homeobox protein GBX-2 (GBX2) expression in 5 cells lines (HELA, 293T/17, Capan-2, SAOS-2, Skin 3,44). The purified Antibody ENSG00000168505 has been tested at 1/1000.

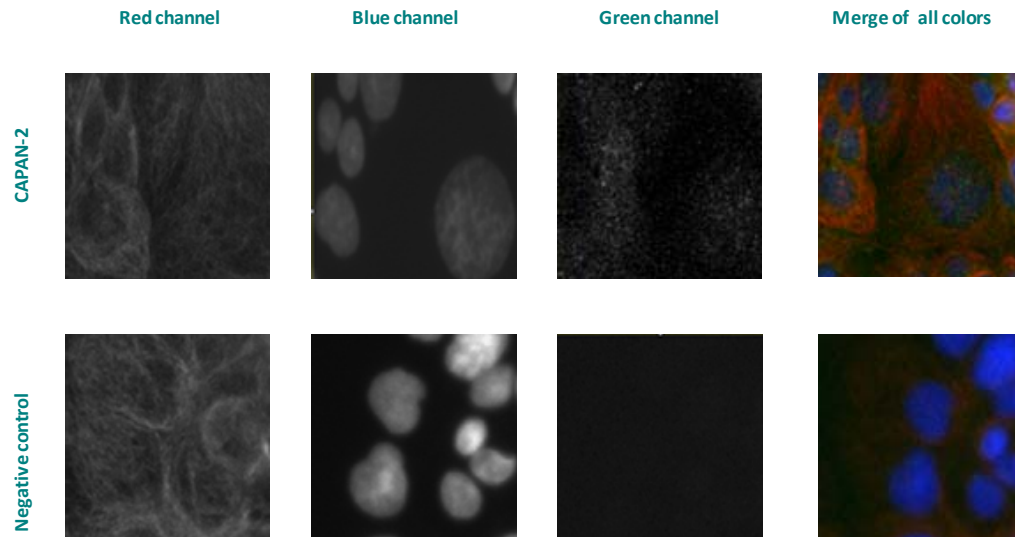
Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- GBX2 antibody (purified)

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of CAPAN-2 (Pancreas adenocarcinoma) cell line shows that GBX2 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.