

## PRODUCT INFORMATION

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**Product name :** HNF1B antibody

**Product type :** Primary antibodies

**Description :** Rabbit polyclonal to HNF1B

**Immunogen :** 3 synthetic peptides (human) conjugated to KLH

**Reacts with :** Hu, Ms

**Tested applications :** ELISA, WB and IF

## GENE INFORMATION

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**Gene Symbol :** HNF1B

**Gene Name :** HNF1 homeobox B

**Ensembl ID :** ENSG00000108753

**Entrez GeneID :** 6928

**GenBank Accession number :** BC017714

**Swiss-Prot :** P35680

**Molecular weight of HNF1B :** 61.3 & 44.7kDa

**Function :** Transcription factor, probably binds to the inverted palindrome 5'-GTAAATNATTAAC-3'.

**Expected subcellular localization :** nucleus.

**Summary :** This gene encodes a member of the homeodomain-containing superfamily of transcription factors. The protein binds to DNA as either a homodimer, or a heterodimer with the related protein hepatocyte nuclear factor 1-alpha. The gene has been shown to function in nephron development, and regulates development of the embryonic pancreas. Mutations in this gene result in renal cysts and diabetes syndrome and noninsulin-dependent diabetes mellitus, and expression of this gene is altered in some types of cancer. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq]

## **APPLICATION NOTE**

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### **Recommended dilution :**

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A titer of 1/600 has been determined. Appropriate specificity controls were run.
- **WB (recombinant protein):** 1/250.
- **WB (cell lysates):** 1/125.
- **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 :** Containing a final concentration of PBS/glycerol (V/V), 0.1% BSA and 0.01% Thimerosal.

**Form :** Liquid

**Storage instruction :** Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

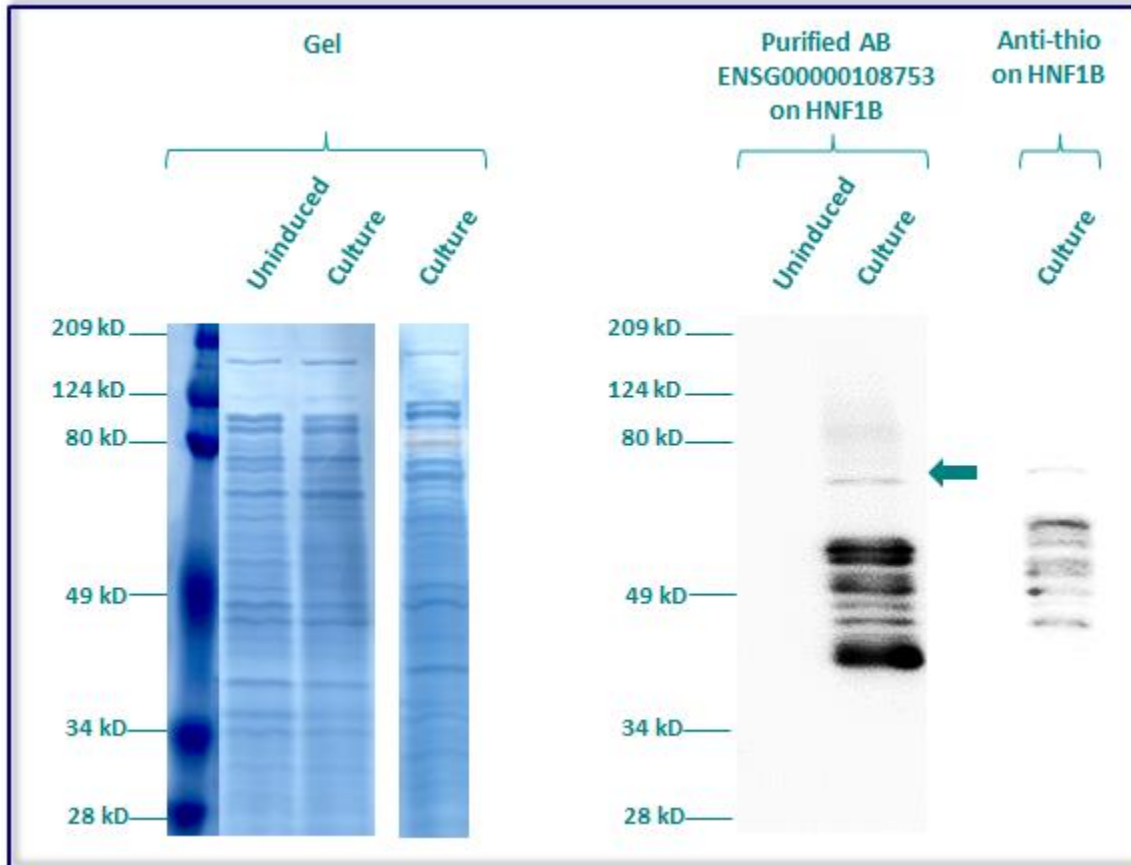
## WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000108753 has been tested at 1/250 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 HNF1B : 75.3kDa (61.3kDa + another 14kDa for the tag).



Gel concentration: 10%

Blocking: in 5% non-fat milk-PBST solution

1<sup>st</sup> Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000124216 at 1:250
- Dilute the anti-thio at 1:5000

60 minutes of incubation

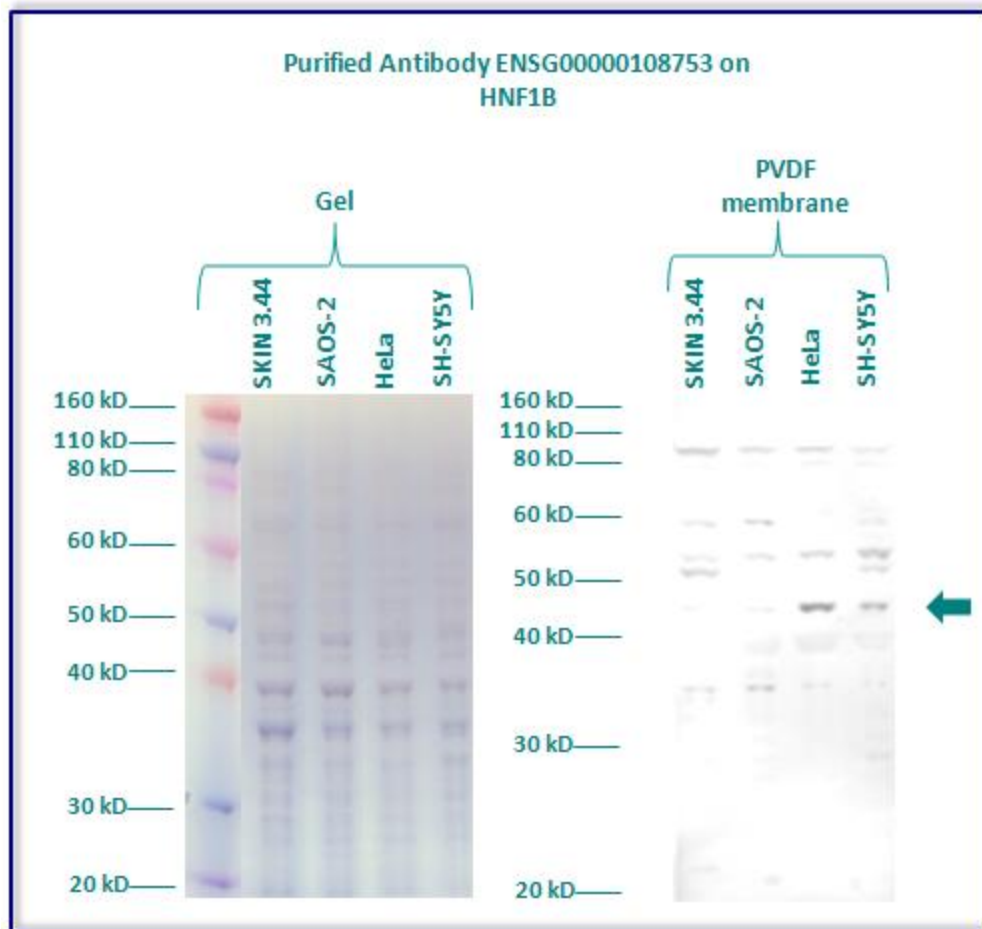
2<sup>nd</sup> Antibody: The antibody is diluted in blocking buffer.

- Dilute the anti-Rabbit IgG HRP conjugated at 1/10000
- 60 minutes of incubation

## WESTERN BLOT ON CELL LYSATE

The purified antibody ENSG00000108753 has been tested at a concentration of 1/125 on total protein extract of SKIN 3.44, SAOS-2, HeLa & SH-SY5Y cell lines.

Molecular weight of HNF1B : 61.3 & 44.8kDa



**Gel concentration: 10%**

**Blocking: in 5% non-fat milk-PBST solution**

**1<sup>st</sup> Antibody: The antibodies are diluted in blocking buffer.**

- Dilute the purified antibody ENSG00000124216 at 1:125  
60 minutes of incubation

**2<sup>nd</sup> Antibody: The antibody is diluted in blocking buffer.**

- Dilute the anti-Rabbit IgG HRP conjugated at 1/10000  
60 minutes of incubation

## IMMUNOFLUORESCENCE ANALYSIS

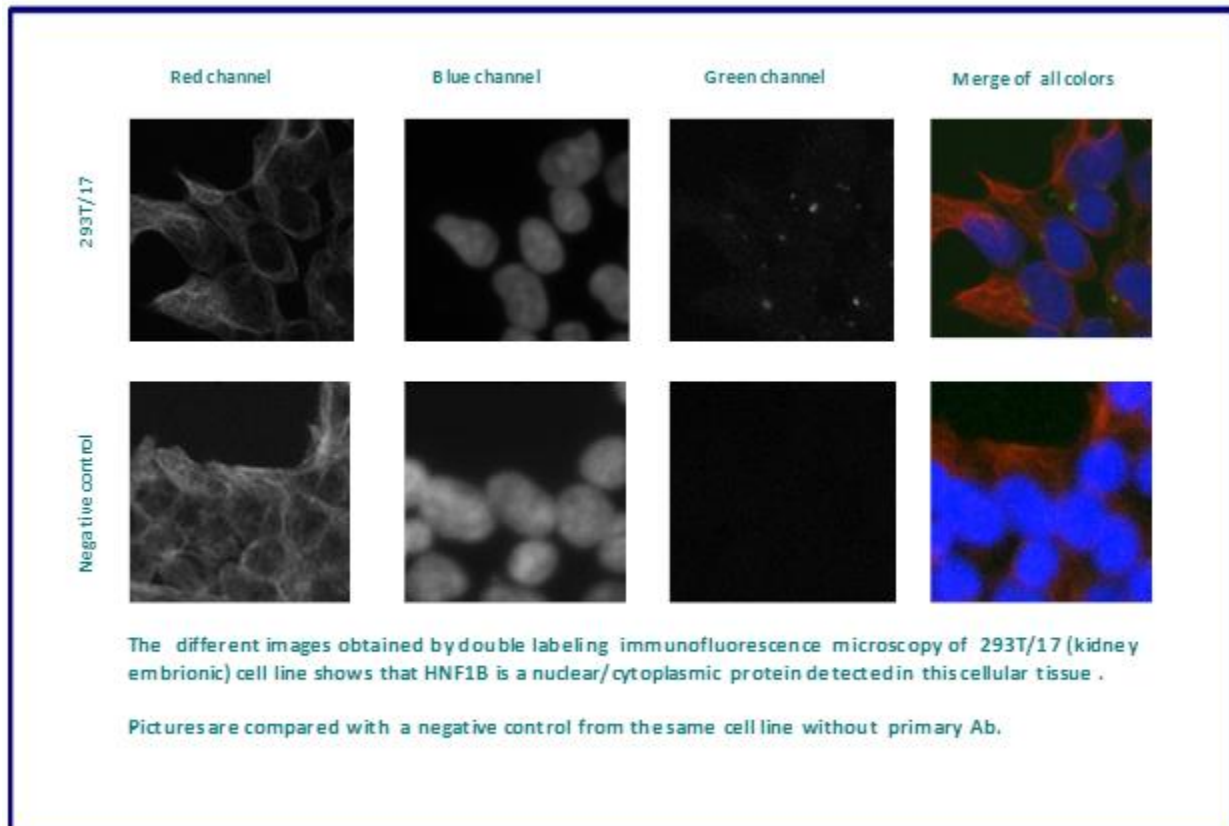
Immunofluorescence analysis of Hepatocyte nuclear factor 1-beta (HNF1B) expression in 5 cells lines (HELA, 293T/17, Capan-2, SH-SY5Y, Skin 3.44). The purified Antibody ENSG00000108753 has been tested at 1/500.

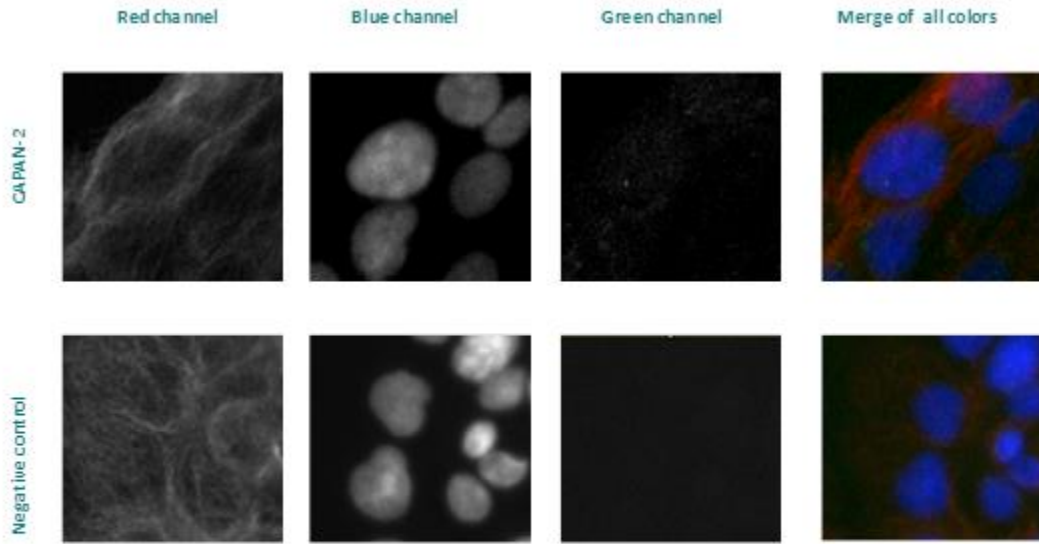
Red staining : cytoskeleton (microtubules/ $\alpha$ -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- HNF1B antibody (purified)

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of CAPAN- 2 (Pancreas adenocarcinoma) cell line shows that HNF1B 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.

Remainig cell lines tested gave a positive result with a nuclear distribution.