

## PRODUCT INFORMATION

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**Product name :** LMX1B antibody

**Product type :** Primary antibodies

**Description :** Rabbit polyclonal to LMX1B

**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 :** LMX1B

**Gene Name :** LIM homeobox transcription factor 1, beta

**Ensembl ID :** ENSG00000136944

**Entrez GeneID :** 4010

**GenBank Accession number :** U77457.1

**Omim ID :** 602575

**Swiss-Prot :** O60663

**Molecular weight of LMX1B :** 42.409kDa (Isoform long) and 41.594 (Isoform short)

**Function :** Essential for the specification of dorsal limb fate at both the zeugopodal and autopodal levels.

**Expected subcellular localization :** Nucleus.

**Expected tissue specificity :** Expressed in most tissues. Highest levels in testis, thyroid, duodenum, skeletal muscle, and pancreatic islets.

**Involvement in disease :** Defects in LMX1B are the cause of nail-patella syndrome (NPS) [MIM:161200]; also known as Onychoosteodysplasia. NPS is a disease that causes abnormal skeletal patterning and renal dysplasia.

## **APPLICATION NOTE**

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### **Recommended dilution :**

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A titer of 1/40000 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.

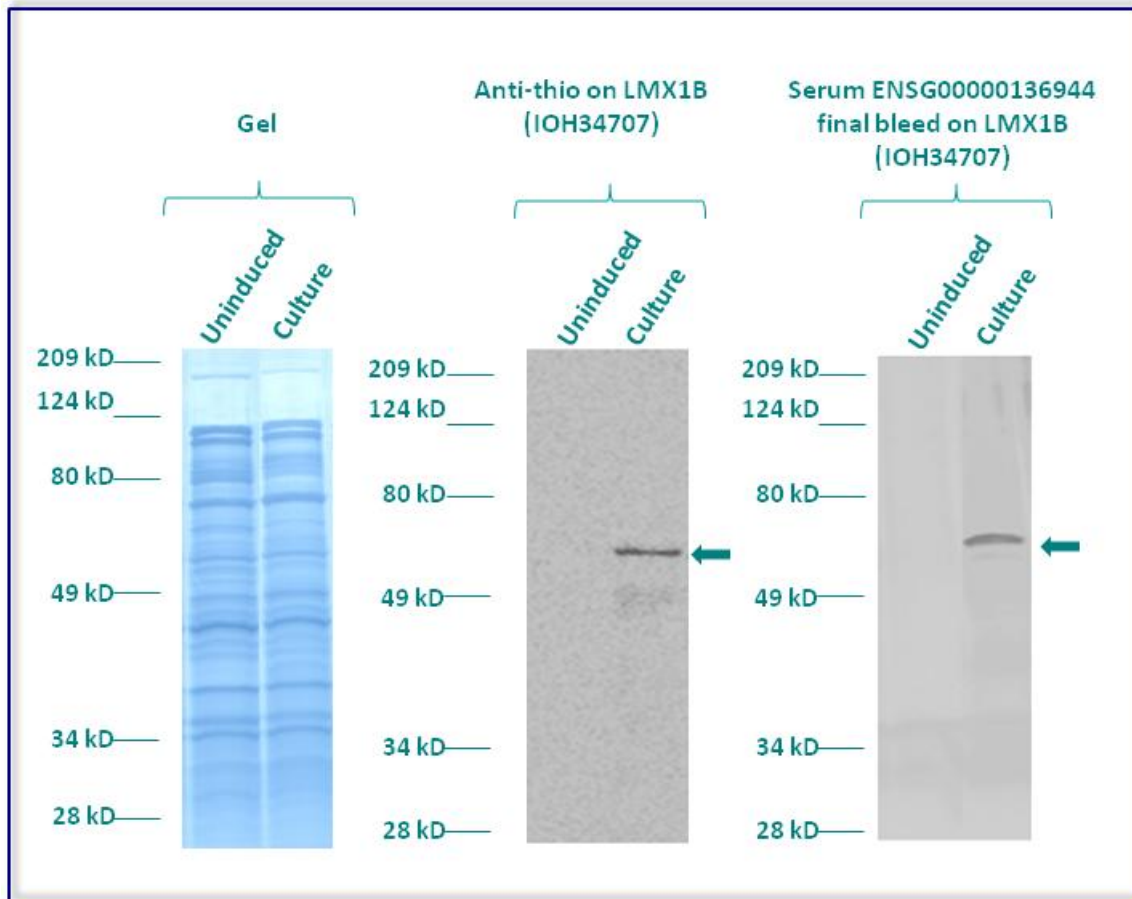
## WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000136944 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 LMX1B : 56.4kDa (42.4kDa + 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 ENSG00000136944 at 1:5000
- 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 1/1000
- 60 minutes of incubation

## IMMUNOFLUORESCENCE ANALYSIS

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Immunofluorescence analysis of LIM homeobox transcription factor 1-beta (LMX1B) expression in 1 cell line (HELA). The purified Antibody ENSG00000136944 has been tested at 1/5000.

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

**Blue staining** : nucleus (Hoechst)

**Green staining** : anti- LMX1B antibody (purified)

**Expected subcellular location** : Nucleus

**Expected tissue specificity** : Expressed in most tissues. Highest levels in testis, thyroid, duodenum, skeletal muscle, and pancreatic islets

