

#### LMX1B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8935c

### **Specification**

## LMX1B Antibody (Center) - Product Information

Application WB, IHC-P,E Primary Accession O60663

Other Accession <u>Q8UVR3</u>, <u>Q88609</u>, <u>P53413</u>

Reactivity Human, Mouse Predicted Chicken, Xenopus

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 175-202

## LMX1B Antibody (Center) - Additional Information

#### **Gene ID 4010**

#### **Other Names**

LIM homeobox transcription factor 1-beta, LIM/homeobox protein 12, LMX-12, LIM/homeobox protein LMX1B, LMX1B

## Target/Specificity

This LMX1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 175-202 amino acids from the Central region of human LMX1B.

#### **Dilution**

WB~~1:1000 IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

LMX1B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### LMX1B Antibody (Center) - Protein Information

## Name LMX1B





Tel: 858.875.1900 Fax: 858.875.1999

Function Transcription factor involved in the regulation of podocyte- expressed genes (PubMed: 24042019, PubMed: 28059119). Essential for the specification of dorsal limb fate at both the zeugopodal and autopodal levels.

#### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108}.

## **Tissue Location**

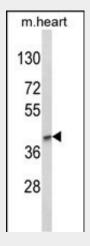
Expressed in most tissues. Highest levels in testis, thyroid, duodenum, skeletal muscle, and pancreatic islets

## LMX1B Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

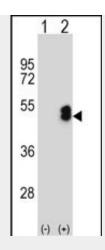
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## LMX1B Antibody (Center) - Images

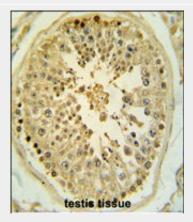


Western blot analysis of LMX1B Antibody (Center) (Cat. #AP8935c) in mouse heart tissue lysates (35ug/lane). LMX1B (arrow) was detected using the purified Pab.





Western blot analysis of LMX1B (arrow) using rabbit polyclonal LMX1B Antibody (Center) (Cat. #AP8935c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the LMX1B gene.



Formalin-fixed and paraffin-embedded human testis tissue reacted with LMX1B Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### LMX1B Antibody (Center) - Background

LMX1B is required for the normal development of the dopaminergic system. Loss of dopaminergic neurons is associated with one of the most prominent human neurological disorders, Parkinson's disease (PD). Dopaminergic neurons play an important role in the control of multiple brain functions including voluntary movement alongside an array of behavioral processes such as mood, reward, addiction, and stress. Lmx1b is one of several transcription factors involved in the generation of dopaminergic neurons in the brain.

# LMX1B Antibody (Center) - References

Ham, J.H., et.al., Korean J. Intern. Med. 24 (3), 274-278 (2009) Bergman, O., et.al., J Neural Transm 116 (3), 333-338 (2009)

## LMX1B Antibody (Center) - Citations

- Lmx1a and Lmx1b regulate mitochondrial functions and survival of adult midbrain dopaminergic neurons.
- <u>Dopaminergic control of autophagic-lysosomal function implicates Lmx1b in Parkinson\'s disease.</u>