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LMX1B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8935c

Product Information

Application	WB, IHC-P, E
Primary Accession	O60663
Other Accession	Q8UVR3, O88609, P53413
Reactivity	Human, Mouse
Predicted	Chicken, Xenopus, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21468
Calculated MW	44917
Antigen Region	175-202

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~~1:100~500 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.

Protein Information

Name	LMX1B
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

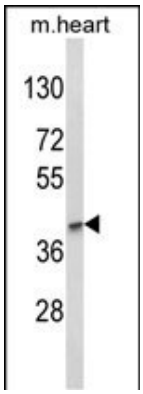
Background

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.

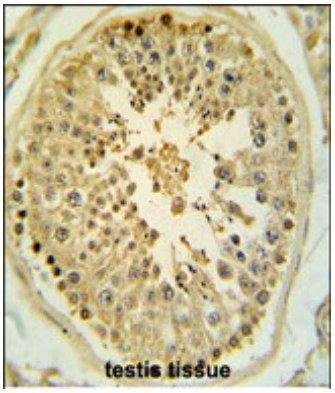
References

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)

Images

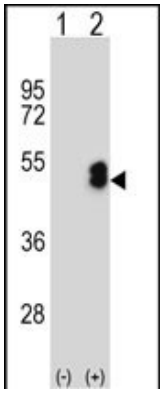


Western blot analysis of LMX1B Antibody (Center) (Cat. #AP8935c) in mouse heart tissue lysates (35ug/lane). LMX1B (arrow) was detected using the purified Pab.



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.

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.



Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.