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LMX1B Antibody
Catalog # ASC11570

Specification

LMX1B Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	O60663
Other Accession	NP_001167617, 4010
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**45 kDa KDa**
Application Notes	**LMX1B antibody can be used for detection of LMX1B by Western blot at 1 - 2 µg/mL. Antibody can also be used for Immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

LMX1B Antibody - Additional Information

Gene ID **4010**

Target/Specificity
Rabbit polyclonal LMX1B antibody was raised against a 17 amino acid peptide near the carboxy terminus of human LMX1B.

The immunogen is located within amino acids 280 - 330 of LMX1B.

Reconstitution & Storage
LMX1B antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
LMX1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LMX1B Antibody - 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}.

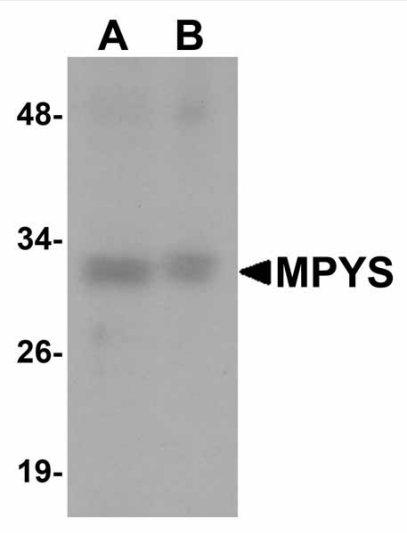
Tissue Location
Expressed in most tissues. Highest levels in testis, thyroid, duodenum, skeletal muscle, and pancreatic islets

LMX1B Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LMX1B Antibody - Images



Western blot analysis of MPYS in (A) K562 and (B) Jurkat cell lysate with MPYS antibody at 1 µg/mL.

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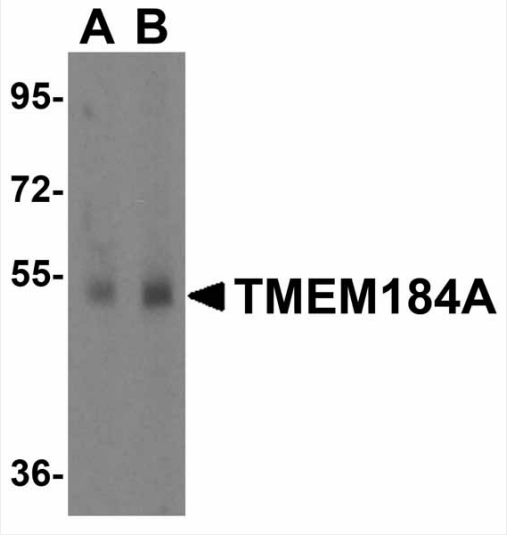

Western blot analysis of TMEM184A in rat brain tissue lysate with TMEM184A antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

LMX1B Antibody - Background

LMX1B Antibody: The LIM homeobox transcription factor 1B (LMX1B) belongs to the LIM-homeodomain family. Members of this family are known to be important for pattern formation during development. LMX1B regulates mid-hindbrain patterning; LMX1B-null mice embryos have a severe reduction in the number of midbrain dopaminergic neurons compared to wild-type. While LMX1B appears to be important for both the development and the survival of dopamine neurons, the related LMX1A is crucial for the differentiation of these cells. However, LMX1A and LMX1B function cooperatively to regulated the proliferation, specification and differentiation of midbrain dopaminergic neuronal progenitors.

LMX1B Antibody - References

Hobert O and Westphal H. Functions of LIM-homeobox genes. Trends Genet. 2000; 16:75-83.
Nakatani T, Kumai M, Mizuhara E, et al. Lmx1a and Lmx1b cooperate with Foxa2 to coordinate the specification of dopaminergic neurons and control of floor plate cell differentiation in the developing mesencephalon. Dev. Biol. 2010; 339:101-13.
Guo C, Qiu HY, Huang Y, et al. Lmx1b is essential for FGF8 and Wnt1 expression in the isthmic organizer during tectum and cerebellum development in mice. Development 2007; 134:317-25.
Chizhikov VV and Millen KJ. Control of roof plate formation by LMX1A in the developing spinal cord. Development 2004; 131:2693-705.