

Datasheet for 600-401-CL6**LMX1A Antibody****Overview**

Description:	Anti-LMX1A (RABBIT) Antibody - 600-401-CL6
Item No.:	600-401-CL6
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The LIM homeobox transcription factor 1 (LMX1A) belongs to the LIM-homeodomain family. Members of this family are known to be important for pattern formation during development. LMX1A binds an A/T-rich sequence and functions in the nucleus as a transcriptional activator to the insulin gene promoter. In the developing embryo, LMX1A is expressed along the neuraxis and leads to the development of the roof plate of the vertebrae. While LMX1A is crucial for the differentiation of dopamine neurons, the related LMX1B appears to be important for both the development and the survival of these cells. It has been suggested that LMX1A might be a useful biomarker or risk factor in tumor aggressiveness.
Synonyms:	LMX1A Antibody, LMX1, LMX1.1, LIM homeobox transcription factor 1-alpha
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	LMX1A
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti- LMX1A antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid peptide near the C-terminus of human LMX1A.

Purity/Specificity: Anti-LMX1A Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least two isoforms are known to exist. This antibody is predicted to not cross-react with LMX1B.

Relevant Links:

- [UniProtKB - Q8TE12](#)
- [GeneID - 4009](#)
- [NCBI - NP_796372](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-LMX1A Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 43 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000 - 1:20,000

IF: 20 µg/mL

IHC: 2.5 µg/mL

WB: 1-2 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

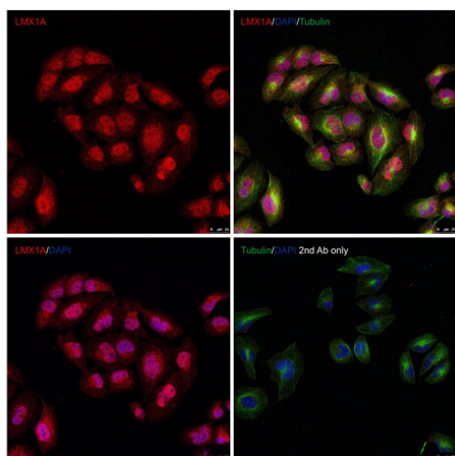
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence of LMX1A.

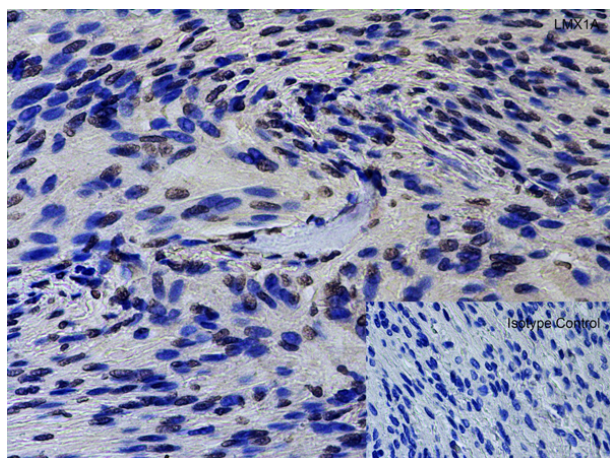
Cell: HeLa cells.

Fixation: methanol-fixed.

Primary Antibody: LMX1A at 10 µg/mL.

Secondary Antibody: goat anti-rabbit IgG secondary antibody at 1:1000. Alpha tubulin was stained with anti-alpha tubulin antibody following by goat anti-mouse IgG secondary antibody.

Staining: LMX1A (red), Alpha tubulin (green), DAPI (blue). Images were captured with confocal microscopy.



Immunohistochemistry

Immunohistochemistry of LMX1A.

Tissue: Human Brain Meningioma.

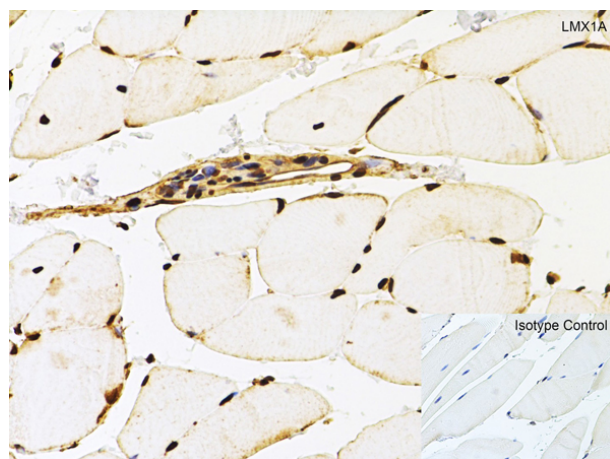
Fixation: paraffin-embedded fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-LMX1A antibody at 2 µg/ml overnight at 4°C.

Secondary Antibody: goat anti-rabbit IgG H&L (HRP) at 1:250.

Counter stained with Hematoxylin.



Immunohistochemistry

Immunohistochemistry of LMX1A.

Tissue: rat spleen tissue.

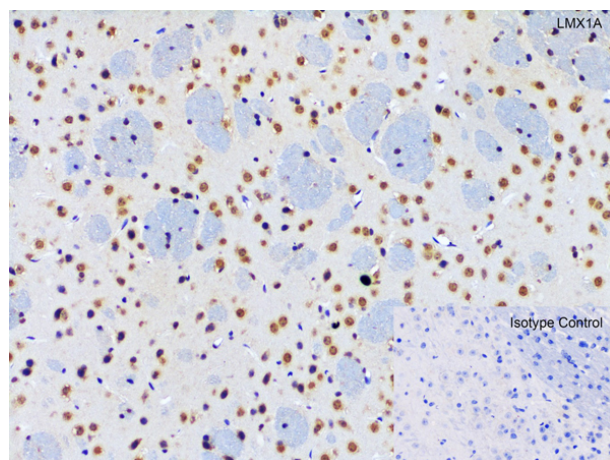
Fixation: paraffin-embedded fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-LMX1A antibody at 5 µg/ml overnight at 4°C.

Secondary Antibody: goat anti-rabbit IgG H&L (HRP) at 1:250.

Counter stained with Hematoxylin.



Immunohistochemistry

Immunohistochemistry of LMX1A.

Tissue: Mouse Brain Tissue.

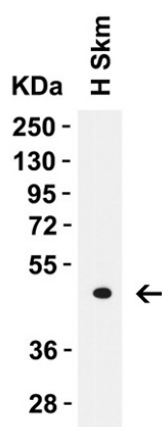
Fixation: paraffin-embedded fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-LMX1A antibody at 2 µg/ml overnight at 4°C.

Secondary Antibody: goat anti-rabbit IgG H&L (HRP) at 1:250.

Counter stained with Hematoxylin.



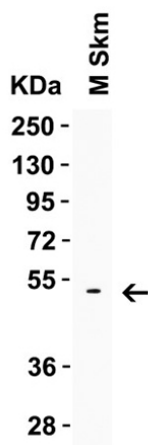
Western Blot

Western Blot of LMX1A.

Load: 10 µg of Human Skeletal Muscle lysates.

Primary Antibody: LMX1A at 1 µg/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



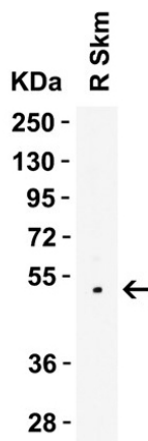
Western Blot

Western Blot of LMx1A.

Load: 10 µg of Mouse Skeletal Muscle lysates.

Primary Antibody: LMx1A at 1 µg/mL for 1h incubation at RT in 5% NFDM/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot

Western Blot of LMx1A.

Load: 10 µg of Rat Skeletal Muscle lysates.

Primary Antibody: LMx1A at 1 µg/mL for 1h incubation at RT in 5% NFDM/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.