

Datasheet for ABIN5006244

anti-LMX1B antibody (AA 111-210) (AbBy Fluor® 750)



| Overview | |
|----------------------|--|
| Quantity: | 100 μL |
| Target: | LMX1B |
| Binding Specificity: | AA 111-210 |
| Reactivity: | Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This LMX1B antibody is conjugated to AbBy Fluor® 750 |
| Application: | Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)) |
| Product Details | |
| Immunogen: | KLH conjugated synthetic peptide derived from human LMX1b/NPS1 |

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|-----------------------|--|
| Isotype: | IgG |
| Cross-Reactivity: | Mouse, Rat |
| Predicted Reactivity: | Human,Dog,Cow,Sheep,Pig |
| Purification: | Purified by Protein A. |

Target Details

| Target: | LMX1B |
|-------------------|-----------------------------|
| Alternative Name: | LMX1b/NPS1 (LMX1B Products) |

Target Details

Background:

Synonyms: LIM homeo box transcription factor 1 beta, LIM homeobox transcription factor 1 beta, LIM homeobox transcription factor 1-beta, LIM-homeobox protein 1.2, LIM/homeobox protein 1.2, LIM/homeobox protein LMX1B, LMX 1.2, LMX-1.2, LMX1.2, LMX1B, LMX1B_HUMAN, NPS 1, NPS1.

Background: Nail-patella syndrome (NPS) is an autosomal dominant disorder characterized by dyplasia of finger nails, skeletal anomalies and, frequently, renal disease. NPS is caused by putative loss-of-function mutations in the transcription factor LMX1B. LMX1B belongs to the LIM-homeodomain family, members of which are known to be important for pattern formation during development. Twenty-two novel mutations may occur in the gene encoding LMX1B and the type and distribution of the mutations support the hypothesis that NPS is the result of haploinsufficiency for LMX1B. LMX1B is also necessary for normal development of the eye and in regulating dopaminergic neurogenesis and may be involved in developmental glaucoma and the aetiology of idiopathic Parkinson?s disease. Specifically, LMX1B along with LIM1 control the initial trajectory of motor axons in the developing mammalian limb. In addition, LMX1B directly regulates the coordinated expression of alpha 3(IV) and alpha 4(IV) collagen required for normal glomerular basement membrane (GBM) morphogenesis, and the dysregulation of LMX1B in GBM contributes to the renal pathology and nephrosis in NPS.

Gene ID: 4010

UniProt: 060663

Pathways: Dopaminergic Neurogenesis

Application Details

Application Notes: IF(IHC-P) 1:50-200

IF(IHC-F) 1:50-200

IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: $1 \mu g/\mu L$

Buffer: Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and

50 % Glycerol.

Handling

| Preservative: | ProClin |
|--------------------|--|
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only. |
| Storage: | -20 °C |
| Storage Comment: | Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles. |
| Expiry Date: | 12 months |