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Lmx1a Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1426c

Product Information

Application	WB, E
Primary Accession	Q9JKU8
Other Accession	Q8TE12
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB09408
Calculated MW	42857
Antigen Region	130-159

Additional Information

Gene ID	110648
Other Names	LIM homeobox transcription factor 1-alpha, LIM/homeobox protein 11, LMX-11, LIM/homeobox protein LMX1A, Lmx1a
Target/Specificity	This Lmx1a antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 130-159 amino acids from the Central region of human Lmx1a.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
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	Lmx1a Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Lmx1a
Function	Acts as a transcriptional activator by binding to an A/T-rich sequence, the FLAT element, in the insulin gene promoter. Required for development of the

roof plate and, in turn, for specification of dorsal cell fates in the CNS and developing vertebrae.

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

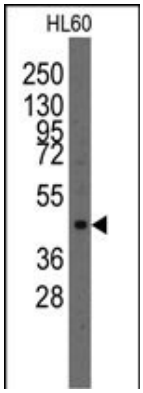
Background

Insulin is produced exclusively by the beta cells in the islets of Langerhans in the pancreas. The level and beta-cell specificity of insulin gene expression are regulated by a set of nuclear genes that bind to specific sequences within the promoter of the insulin gene (INS; MIM 176730) and interact with RNA polymerase to activate or repress transcription. LMX1 is a homeodomain protein that binds an A/T-rich sequence in the insulin promoter and stimulates transcription of insulin.

References

Mangale,V.S., Science 319 (5861), 304-309 (2008)
Robertson,E.J., Development 134 (24), 4335-4345 (2007)

Images



Western blot analysis of anti-Lmx1a Pab (Cat.#AP1426c) in HL60 cell line lysates (35ug/lane). Lmx1a(arrow) was detected using the purified Pab.

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