

LMX1A Antibody
Catalog # ASC11569**Specification**

LMX1A Antibody - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q8TE12
Other Accession	NP_796372 , 4009
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	42 kDa KDa
Application Notes	LMX1A antibody can be used for detection of LMX1A by Western blot at 1 - 2 µg/mL. Antibody can also be used for Immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

LMX1A Antibody - Additional InformationGene ID **4009****Target/Specificity**

Rabbit polyclonal LMX1A antibody was raised against a 16 amino acid peptide near the carboxy terminus of human LMX1A.

The immunogen is located within amino acids 300 - 350 of LMX1A.

Reconstitution & Storage

LMX1A antibody can be stored at 4°C for three months and -20°C, 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

LMX1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LMX1A Antibody - 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 (By similarity).

Cellular Location

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

Tissue Location

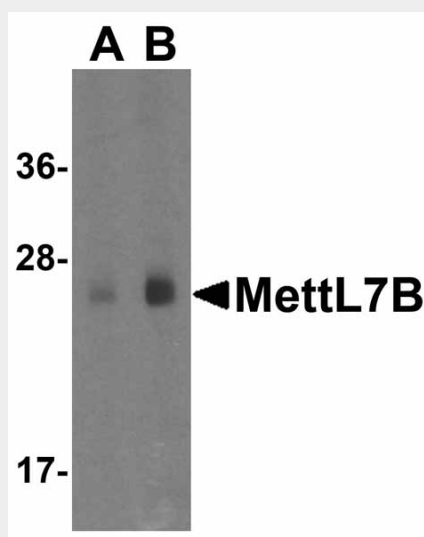
Isoform 1 is expressed in many tissues. Not found in heart, liver, spleen and testis. Relatively highly expressed in fetal brain. Isoform LMX1A-4AB is expressed in testis

LMX1A Antibody - Protocols

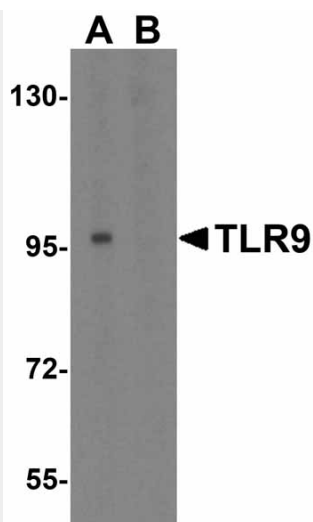
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

LMX1A Antibody - Images



Western blot analysis of MettL7B in human colon tissue lysate with MettL7B antibody at (A) 1 and (B) 2 µg/mL.



Western blot analysis of TLR9 in Jurkat cell lysate with TLR9 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide

LMX1A Antibody - Background

LMX1A Antibody: 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.

LMX1A Antibody - References

Failli V, Bachy I and Retaux S. Expression of the LIM-homeodomain gene Lmx1a (dreher) during development of the mouse nervous system. *Mech. Dev.* 2002; 118:225-8.

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.

Chizhikov VV and Millen KJ. Control of roof plate formation by LMX1A in the developing spinal cord. *Development* 2004; 131:2693-705.

Lin CK, Chao TK, Lai HC, et al. LMX1A as a prognostic marker in ovarian mucinous cystadenocarcinoma. *Am. J. Clin. Pathol.* 2012; 137:971-7.