

MEOX1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14566c

Specification

MEOX1 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	P50221
Other Accession	NP_004518.1 , NP_001035091.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	27997
Antigen Region	136-165

MEOX1 Antibody (Center) - Additional Information

Gene ID 4222

Other Names

Homeobox protein MOX-1, Mesenchyme homeobox 1, MEOX1, MOX1

Target/Specificity

This MEOX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 136-165 amino acids from the Central region of human MEOX1.

Dilution

WB~~1:1000

IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

MEOX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MEOX1 Antibody (Center) - Protein Information

Name MEOX1

Synonyms MOX1

Function Mesodermal transcription factor that plays a key role in somitogenesis and is specifically required for sclerotome development. Required for maintenance of the sclerotome polarity and formation of the cranio-cervical joints (PubMed:[23290072](#), PubMed:[24073994](#)). Binds specifically to the promoter of target genes and regulates their expression. Activates expression of NKX3-2 in the sclerotome. Activates expression of CDKN1A and CDKN2A in endothelial cells, acting as a regulator of vascular cell proliferation. While it activates CDKN1A in a DNA-dependent manner, it activates CDKN2A in a DNA-independent manner. Required for hematopoietic stem cell (HSCs) induction via its role in somitogenesis: specification of HSCs occurs via the deployment of a specific endothelial precursor population, which arises within a sub-compartment of the somite named endotome.

Cellular Location

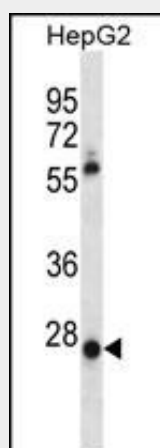
Nucleus {ECO:0000250|UniProtKB:P32442}. Cytoplasm {ECO:0000250|UniProtKB:P32442}.
Note=Localizes predominantly in the nucleus. {ECO:0000250|UniProtKB:P32442}

MEOX1 Antibody (Center) - Protocols

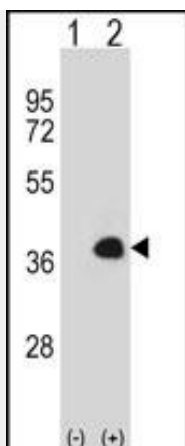
Provided below are standard protocols that you may find useful for product applications.

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

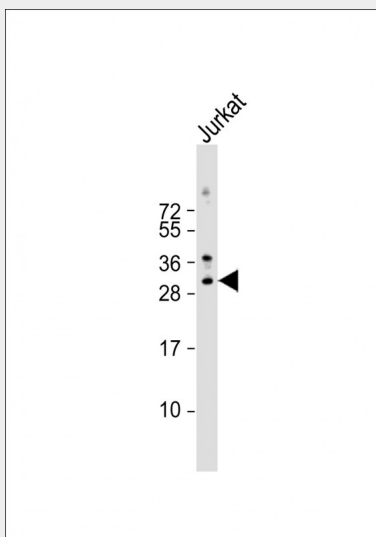
MEOX1 Antibody (Center) - Images



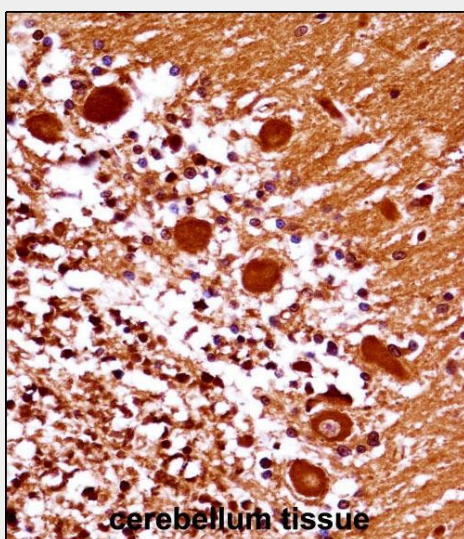
MEOX1 Antibody (Center) (Cat. #AP14566c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the MEOX1 antibody detected the MEOX1 protein (arrow).



Western blot analysis of MEOX1 (arrow) using rabbit polyclonal MEOX1 Antibody (Center) (Cat. #AP14566c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the MEOX1 gene.



Anti-MEOX1 Antibody (Center) at 1:1000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 28 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MEOX1 Antibody (Center) (AP14566c) immunohistochemistry analysis in formalin fixed and paraffin embedded human cerebellum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MEOX1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

MEOX1 Antibody (Center) - Background

This gene encodes a member of a subfamily of non-clustered, diverged, antennapedia-like homeobox-containing genes. The encoded protein may play a role in the molecular signaling network regulating somite development. Alternatively spliced transcript variants encoding different isoforms have been described.

MEOX1 Antibody (Center) - References

Vatanavicharn, N., et al. Am. J. Med. Genet. A 143A (19), 2292-2302 (2007) :
Wissmuller, S., et al. Nucleic Acids Res. 34(6):1735-1744(2006)
Gianakopoulos, P.J., et al. J. Biol. Chem. 280(22):21022-21028(2005)
Petropoulos, H., et al. J. Biol. Chem. 279(23):23874-23881(2004)
Stamatakis, D., et al. FEBS Lett. 499(3):274-278(2001)