

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

**Specification**

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**MEOX1 Antibody (Center) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P50221</a>
Other Accession	<a href="#">NP_004518.1</a> , <a href="#">NP_001035091.1</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>27997</b>
Antigen Region	<b>136-165</b>

**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

**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

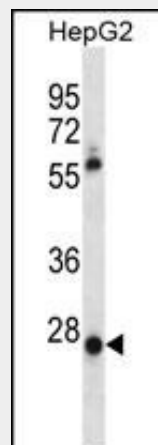
Nucleus {ECO:0000250|UniProtKB:P32442}. Cytoplasm {ECO:0000250|UniProtKB:P32442}. Note=Localizes predominantly in the nucleus. {ECO:0000250|UniProtKB:P32442}

#### MEOX1 Antibody (Center) - Protocols

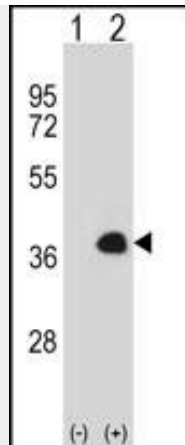
Provided below are standard protocols that you may find useful for product applications.

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

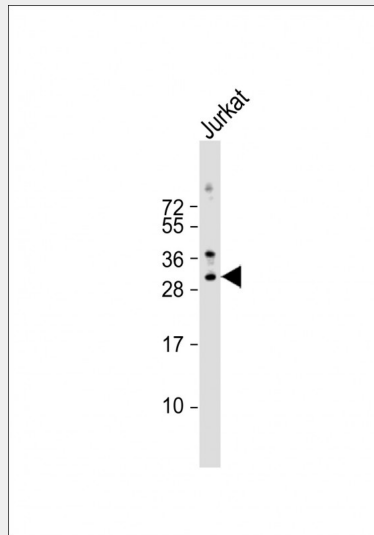
#### MEOX1 Antibody (Center) - Images



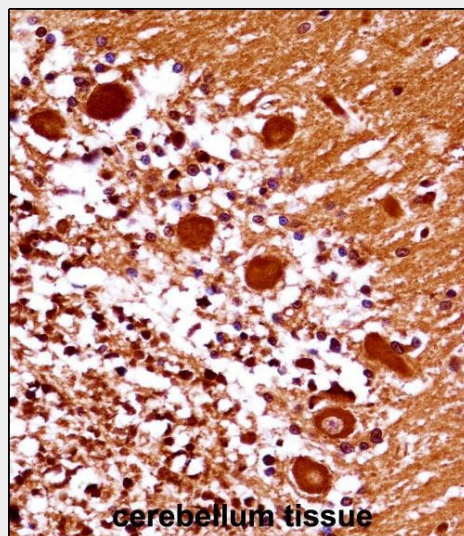
MEOX1 Antibody (Center) (Cat. #AP14566c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the MEOX1 antibody detected the MEOX1 protein (arrow).



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 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)