

MOX1 (Meox1) Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7267A

Product Information

Application	WB, IF, E
Primary Accession	P50221
Other Accession	NP_004518
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB10382
Calculated MW	27997
Antigen Region	7-38

Additional Information

Gene ID	4222
Other Names	Homeobox protein MOX-1, Mesenchyme homeobox 1, MEOX1, MOX1
Target/Specificity	This MOX1 (Meox1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-38 amino acids from the N-terminal region of human MOX1 (Meox1).
Dilution	WB~~1:1000 IF~~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	MOX1 (Meox1) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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}

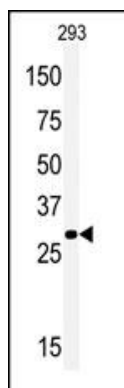
Background

Meox1 is a member of a subfamily of non-clustered, diverged, antennapedia-like homeobox-containing genes. This protein may play a role in the molecular signaling network regulating somite development.

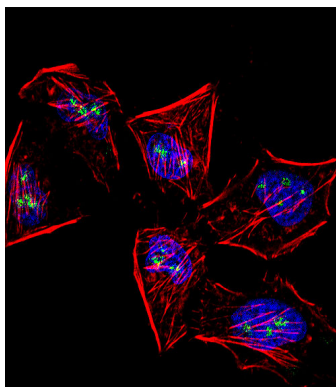
References

Vatanavicharn,N., Am. J. Med. Genet. A 143 (19), 2292-2302 (2007)
Petropoulos,H., J. Biol. Chem. 279 (23), 23874-23881 (2004)
Stelnicki,E.J., Differentiation 62 (1), 33-41 (1997)
Futreal,P.A., Hum. Mol. Genet. 3 (8), 1359-1364 (1994)

Images



Western blot analysis of anti-Meox1 Antibody (N-term) (Cat. #AP7267a) in 293 cell line lysates (35ug/lane). Meox1 (arrow) was detected using the purified Pab.



Fluorescent confocal image of HeLa cell stained with Meox1 (Human N-term)(Cat#AP7267a).HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with Meox1 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min). Meox1 immunoreactivity is localized to Nucleolus significantly.

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