

# Mouse Hoxa1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14464c

## Product Information

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Application	WB, E
Primary Accession	<a href="#">P09022</a>
Other Accession	<a href="#">O08656</a> , <a href="#">P49639</a>
Reactivity	Human, Rat, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35131
Calculated MW	36037
Antigen Region	191-219

## Additional Information

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Other Names	Homeobox protein Hox-A1, Early retinoic acid 1, Homeobox protein Hox-16, Homeoboxless protein ERA-1-399, Homeotic protein ERA-1-993, Hoxa1, Era-1, Hox-16, Hoxa-1
Target/Specificity	This Mouse Hoxa1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 191-219 amino acids from the Central region of mouse Hoxa1.
Dilution	WB~~1:1000 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	Mouse Hoxa1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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Name	Hoxa1
Synonyms	Era-1, Hox-1.6, Hoxa-1
Function	Sequence-specific transcription factor (PubMed: <a href="#">29465778</a> ). Regulates

multiple developmental processes including brainstem, inner and outer ear, abducens nerve and cardiovascular development and morphogenesis as well as cognition and behavior (By similarity). Also part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis. Acts on the anterior body structures. Seems to act in the maintenance and/or generation of hindbrain segments (By similarity). Activates transcription in the presence of PBX1A and PKNOX1 (PubMed:[29465778](#)). The homeoboxless ERA-1-399 protein could act as a competitive inhibitor of the ERA-1-993 protein by competing for interaction with regulatory protein(s) while being unable to bind to DNA.

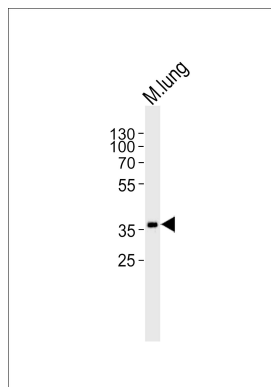
#### Cellular Location

Nucleus.

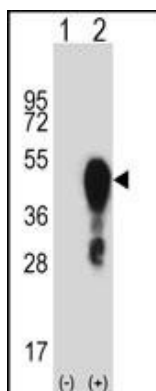
## Background

Sequence-specific transcription factor which is part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis. Acts on the anterior body structures. Seems to act in the maintenance and/or generation of hindbrain segments. The homeobox domain presumably directs sequence-specific DNA binding. The N-terminal portion of ERA-1-993 may be involved in interactions with one or more other regulatory proteins. Such an interaction could regulate either the DNA-binding activity or the transcriptional regulatory activity of ERA-1-993. The homeoboxless ERA-1-399 protein could act as a competitive inhibitor of the ERA-1-993 protein by competing for interaction with regulatory protein(s) while being unable to bind to DNA.

## Images

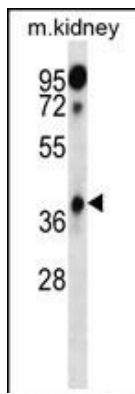


Western blot analysis of lysate from mouse lung tissue lysate, using Mouse Hoxa1 Antibody (Center)(Cat. #AP14464c). AP14464c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



Western blot analysis of Hoxa1 (arrow) using rabbit polyclonal Mouse Hoxa1 Antibody (Center) (Cat. #AP14464c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the Hoxa1 gene.

Mouse Hoxa1 Antibody (Center) (Cat. #AP14464c) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the Hoxa1 antibody detected the Hoxa1 protein (arrow).



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