

# Mouse Hoxal Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14464c

## **Specification**

# Mouse Hoxal Antibody (Center) - Product Information

Application WB,E
Primary Accession P09022

Other Accession
Reactivity
O08656, P49639
Human, Mouse

Predicted Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 36037
Antigen Region 191-219

# Mouse Hoxa1 Antibody (Center) - Additional Information

#### **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.

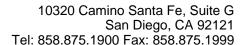
# **Precautions**

Mouse Hoxa1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Hoxa1 Antibody (Center) - Protein Information

## Name Hoxa1

Synonyms Era-1, Hox-1.6, Hoxa-1





**Function** Sequence-specific transcription factor (PubMed:<u>29465778</u>). 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:<u>29465778</u>). The homeoboxless ERA-1-399 protein could act as a competitive inhibitor of the ERA-1-993 protein by competing for interaction with

**Cellular Location** Nucleus.

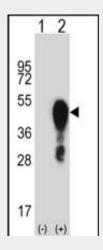
## Mouse Hoxal Antibody (Center) - Protocols

regulatory protein(s) while being unable to bind to DNA.

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

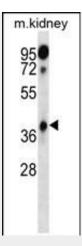
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Mouse Hoxa1 Antibody (Center) - Images

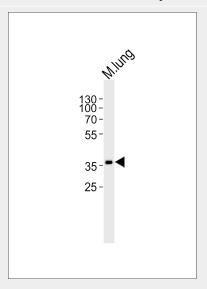


Western blot analysis of Hoxa1 (arrow) using rabbit polyclonal Mouse Hoxa1 Antibody (Center) (Cat. #AP14464c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the Hoxa1 gene.





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).



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.

# Mouse Hoxa1 Antibody (Center) - 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.