

Anti-HOXA1 Antibody
Catalog # ABO11053**Specification**

Anti-HOXA1 Antibody - Product Information

Application	WB
Primary Accession	P49639
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Homeobox protein Hox-A1(HOXA1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-HOXA1 Antibody - Additional Information

Gene ID 3198

Other Names

Homeobox protein Hox-A1, Homeobox protein Hox-1F, HOXA1, HOX1F

Calculated MW

36641 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Nucleus.

Protein Name

Homeobox protein Hox-A1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human HOXA1(1-15aa MDNARMNSFLEYPIL), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the Antp homeobox family. Labial subfamily.

Anti-HOXA1 Antibody - Protein Information

Name HOXA1

Synonyms HOX1F

Function

Sequence-specific transcription factor (By similarity). Regulates multiple developmental processes including brainstem, inner and outer ear, abducens nerve and cardiovascular development and morphogenesis as well as cognition and behavior (PubMed:16155570). 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 PKNX1 (By similarity).

Cellular Location

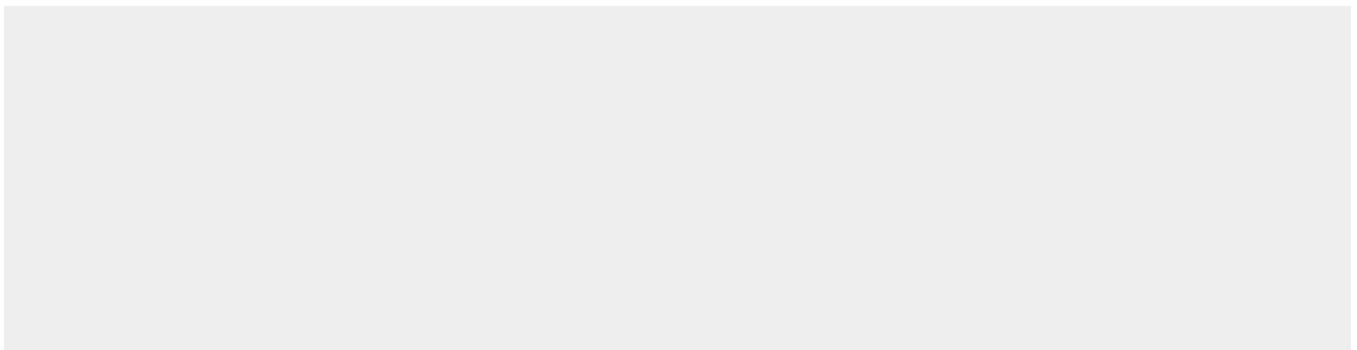
Nucleus {ECO:0000250|UniProtKB:P09022}.

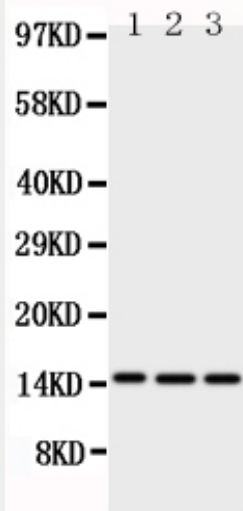
Anti-HOXA1 Antibody - Protocols

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](#)

Anti-HOXA1 Antibody - Images





Anti-HOXA1 antibody, ABO11053, Western blotting
Lane 1: MCF-7 Cell Lysate
Lane 2: SGC Cell Lysate
Lane 3: A549 Cell Lysate

Anti-HOXA1 Antibody - Background

HOXA1(HOMEBOX A1), also called HOMEBOX 1F, is a protein that in humans is encoded by the HOXA1 gene. In PA-1 teratocarcinoma cells, HOXA1 was induced by retinoic acid earlier than other HOXA cluster genes. The HOXA1 gene is mapped on 7p15.2. In vertebrates, the genes encoding the class of transcription factors called homeobox genes are found in clusters named A, B, C, and D on four separate chromosomes. Expression of these proteins is spatially and temporally regulated during embryonic development. A common polymorphism in the HOXA1 gene is associated with a susceptibility to autism spectrum disorder. Three-dimensional reconstructions of Hoxa1 -/- rhombencephalon revealed that it bears only 5 rhombomeric structures instead of the normal 7. A single maternal administration of a low dose of the vitamin A metabolite retinoic acid was sufficient to compensate the requirement for Hoxa1 function in Hoxa1-deficient mice.