

Product name:	Hox-A1 Rabbit Polyclonal Antibody
Cat number:	ABN12164
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human HOXA1. AA range:171-220
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	37kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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. This gene is part of the A cluster on chromosome 7 and encodes a DNA-binding transcription factor which may regulate gene expression, morphogenesis, and differentiation. The encoded protein may be involved in the placement of hindbrain segments in the proper location along the anterior-posterior axis during development. Two transcript variants encoding two different isoforms have been found for this gene, with only one of the isoforms containing the homeodomain region. [provided by RefSeq, Jul 2008],disease:Defects in HOXA1 are the cause of Athabaskan brainstem dysgenesis syndrome (ABSD) [MIM:601536]; also known as Narvajo brainstem syndrome. This syndrome is characterized by horizontal gaze palsy, sensorineural deafness, central hypoventilation, and developmental delay. Some patients had swallowing dysfunction, vocal cord paralysis, facial paresis, seizures, and cardiac outflow tract anomalies.,disease:Defects in HOXA1 are the cause of Bosley-Salih-Alorainy syndrome (BSAS) [MIM:601536]. Affected individuals show horizontal gaze abnormalities, deafness, facial weakness, vascular malformations of the internal carotid arteries and cardiac outflow tract. Some patients manifest mental retardation and autism spectrum disorder. In contrast to individuals with ABSD, central hypoventilation is not observed in individuals with BSAS.,function: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.,similarity:Belongs to the Antp homeobox family. Labial subfamily.,similarity:Contains 1 homeobox DNA-binding domain.,