10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HOXA3 Rabbit pAb

HOXA3 Rabbit pAb
Catalog # AP54446

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O43365
Predicted	Human, Mouse, Rat, Dog, Pig, Rabbit, Zebrafish, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46369
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HOXA3
Epitope Specificity	201-300/443
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Belongs to the Antp homeobox family. Contains 1 homeobox DNA-binding domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The Hox proteins play a role in development and cellular differentiation by regulating downstream target genes. Specifically, the Hox proteins direct DNA-protein and protein-protein interactions that assist in determining the morphologic features associated with the anterior-posterior body axis. The mammalian HOX gene complex consists of 39 genes that are located on four linkage groups, which are dispersed over four chromosomes. HOX genes that occupy the same relative position along the 5' to 3' coordinate (trans-paralogous genes) are more similar in sequence and expression pattern than adjacent HOX genes on the same chromosome. HoxA3, in conjunction with Pax1, mediates the development of the thymus, parathyroid gland, and carotid body. Its expression in the third pharyngeal arch and pouch is required for development of the third arch artery, and homozygous null HoxA3 mutants lack the carotid body. HoxA3 also regulates hindbrain development by controlling the axon projection pattern of motor neurons and sensory neurons of the proximal and distal ganglia.

Additional Information

Gene ID	3200
Other Names	Homeobox protein Hox-A3, Homeobox protein Hox-1E, HOXA3, HOX1E
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	HOXA3
Synonyms	HOX1E
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.
Cellular Location	Nucleus.

Background

The Hox proteins play a role in development and cellular differentiation by regulating downstream target genes. Specifically, the Hox proteins direct DNA-protein and protein-protein interactions that assist in determining the morphologic features associated with the anterior-posterior body axis. The mammalian HOX gene complex consists of 39 genes that are located on four linkage groups, which are dispersed over four chromosomes. HOX genes that occupy the same relative position along the 5’ to 3’ coordinate (trans-paralogous genes) are more similar in sequence and expression pattern than adjacent HOX genes on the same chromosome. HoxA3, in conjunction with Pax1, mediates the development of the thymus, parathyroid gland, and carotid body. Its expression in the third pharyngeal arch and pouch is required for development of the third arch artery, and homozygous null HoxA3 mutants lack the carotid body. HoxA3 also regulates hindbrain development by controlling the axon projection pattern of motor neurons and sensory neurons of the proximal and distal ganglia.