



Rabbit Anti-HOXD9 antibody

SL8603R

Product Name:	HOXD9
Chinese Name:	transcriptional regulatory factorHOXD9抗体
Alias:	homeobox D9; Homeobox protein Hox D9; Hox 4.3; Hox 5.2; HOX4; HOX4C; RP23 313J15.10; HXD9 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	36kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HOXD9:251-352/352
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	The Hox proteins play a role in patterns of embryonic development and cellular differentiation by regulating downstream target genes. In vivo, the HoxD9 protein interacts with the autoregulatory and cross-regulatory enhancers of the murine HoxB1 and human HoxD9 genes. Specifically, the HoxD9 protein interacts with the human control region (HCR) of the HoxD9 gene, thus inducing transcription of the HoxD9 promoter. HoxD9 may be a multifunctional transcriptional regulator, as it contains

different activation domains. Activation of HoxD9 depends on the structure of the target regulatory element, and results in differential cofactor interaction. The HoxD9 protein is expressed in the early stages of mouse joint development, primarily in the articular cartilage. HoxD9 transcripts are also detected in the synovial tissue of arthritic mice, but not in that of normal mice, suggesting that HoxD9 may have a role in the pathology of arthritis. Furthermore, the HoxD9 protein is highly expressed in the synoviocytes of patients with rheumatoid arthritis (RA), but not in osteoarthritis patients. The human HoxD9 protein is also differentially expressed in the human cervical cancer cell line HeLa, but is not expressed in the normal cervix and may thus play a role in tumorigenesis.

Function:

This gene belongs to the homeobox family of genes. The homeobox genes encode a highly conserved family of transcription factors that play an important role in morphogenesis in all multicellular organisms. Mammals possess four similar homeobox gene clusters, HOXA, HOXB, HOXC and HOXD, located on different chromosomes, consisting of 9 to 11 genes arranged in tandem. This gene is one of several homeobox HOXD genes located at 2q31-2q37 chromosome regions. Deletions that removed the entire HOXD gene cluster or 5' end of this cluster have been associated with severe limb and genital abnormalities. The exact role of this gene has not been determined.

Subcellular Location:

Nuclear

Similarity:

Belongs to the Abd-B homeobox family.
Contains 1 homeobox DNA-binding domain.

SWISS:

P28356

Gene ID:

3235

Database links:

[Entrez Gene: 771214](#)Chicken

[Entrez Gene: 3235](#)Human

[Entrez Gene: 15438](#)Mouse

[Entrez Gene: 688999](#)Rat

[Omim: 142982](#)Human

[SwissProt: P28356](#)Human

[SwissProt: P28357](#)Mouse

[SwissProt: B5DFK3](#)Rat

[Unigene: 236646](#)Human

[Unigene: 26544](#)Mouse

[Unigene: 224625](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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