bs-8603R

[Primary Antibody]

HOXD9 Rabbit pAb

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DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

GenelD: 3235 SWISS: P28356

Target: HOXD9

Immunogen: KLH conjugated synthetic peptide derived from human HOXD9:

251-352/352.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

Background: 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 $\ensuremath{\mathsf{HoxD9}}$ genes. Specifically, the $\ensuremath{\mathsf{HoxD9}}$ 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.

Applications: WB (1:500-2000)

IHC-P (1:100-500) IHC-F (1:100-500) **IF** (1:100-500) ICC/IF (1:100-500) **ELISA** (1:5000-10000)

Reactivity: (predicted: Human, Mouse,

Rat, Rabbit, Pig, Cow,

Chicken, Dog)

Predicted MW.: 36 kDa

Subcellular Location: Nucleus

SELECTED CITATIONS —

- [IF=6.8] Ye Jiazhou. et al. Single cell-spatial transcriptomics and bulk multi-omics analysis of heterogeneity and ecosystems in hepatocellular carcinoma. NPJ PRECIS ONCOL. 2024 Nov;8(1):1-18 IHC; Human. 39548284
- [IF=3.7] Zhuang Sun. et al. FTO promotes proliferation and migration of bladder cancer via enhancing stability of STAT3 mRNA in an m6A-dependent manner. EPIGENETICS-US. 2023;18(1):Article: 2242688 Other; . 37538000