

Goat Anti-HOXD10 Antibody

Peptide-affinity purified goat antibody Catalog # AF1537a

### Specification

# **Goat Anti-HOXD10 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>P28358</u> NP\_002139, 3236, 15430 (mouse), 303991 (rat) Human Mouse, Rat, Horse Goat Polyclonal 100ug/200ul IgG 38411

### Goat Anti-HOXD10 Antibody - Additional Information

Gene ID 3236

**Other Names** Homeobox protein Hox-D10, Homeobox protein Hox-4D, Homeobox protein Hox-4E, HOXD10, HOX4D, HOX4E

**Dilution** WB~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-HOXD10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-HOXD10 Antibody - Protein Information

Name HOXD10

Synonyms HOX4D, HOX4E



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.

**Tissue Location** Strongly expressed in the adult male and female urogenital tracts

# Goat Anti-HOXD10 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Goat Anti-HOXD10 Antibody - Images



AF1537a (0.2  $\mu$ g/ml) staining of Human Kidney lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1537a (3.8  $\mu$ g/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.





EB08884 (3.8µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB08884 Flow cytometric analysis of paraformaldehyde fixed HEK293 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.

### Goat Anti-HOXD10 Antibody - Background

This gene is a member of the Abd-B homeobox family and encodes a protein with a homeobox DNA-binding domain. It is included in a cluster of homeobox D genes located on chromosome 2. The encoded nuclear protein functions as a sequence-specific transcription factor that is expressed in the developing limb buds and is involved in differentiation and limb development. Mutations in this gene have been associated with Wilm's tumor and congenital vertical talus (also known as rocker-bottom foot deformity or congenital convex pes valgus) and/or a foot deformity resembling that seen in Charcot-Marie-Tooth disease.

### Goat Anti-HOXD10 Antibody - References

High-density association study of 383 candidate genes for volumetric BMD at the femoral neck and lumbar spine among older men. Yerges LM, et al. J Bone Miner Res, 2009 Dec. PMID 19453261. MicroRNA-7, a homeobox D10 target, inhibits p21-activated kinase 1 and regulates its functions. Reddy SD, et al. Cancer Res, 2008 Oct 15. PMID 18922890.

Absence of HOXD10 mutations in idiopathic clubfoot and sporadic vertical talus. Gurnett CA, et al. Clin Orthop Relat Res, 2007 Sep. PMID 17417092.



Mutations in HOXD13 underlie syndactyly type V and a novel brachydactyly-syndactyly syndrome. Zhao X, et al. Am J Hum Genet, 2007 Feb. PMID 17236141.

[Analysis of association between 5' HOXD gene and idiopathic congenital talipes equinovarus] Wang LL, et al. Zhonghua Yi Xue Yi Chuan Xue Za Zhi, 2005 Dec. PMID 16331564.