

**Goat Anti-HOXD10 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1537a****Specification**

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

Application	WB, IHC, E
Primary Accession	<a href="#">P28358</a>
Other Accession	<a href="#">NP_002139</a> , <a href="#">3236</a> , <a href="#">15430 (mouse)</a> , <a href="#">303991 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Horse
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	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

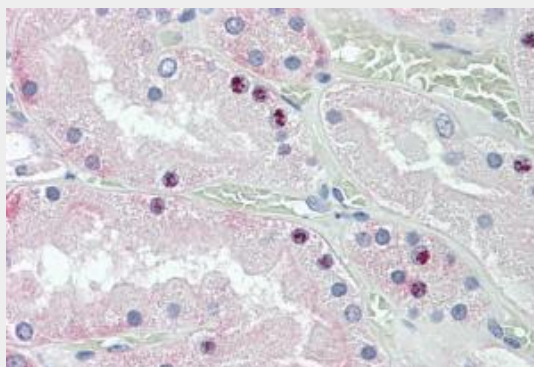
**Goat Anti-HOXD10 Antibody - Protocols**

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

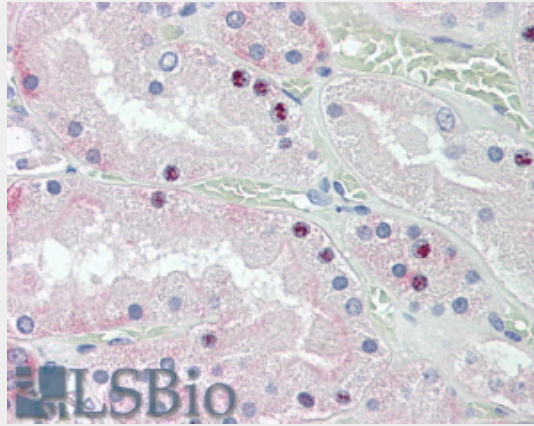
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-HOXD10 Antibody - Images**

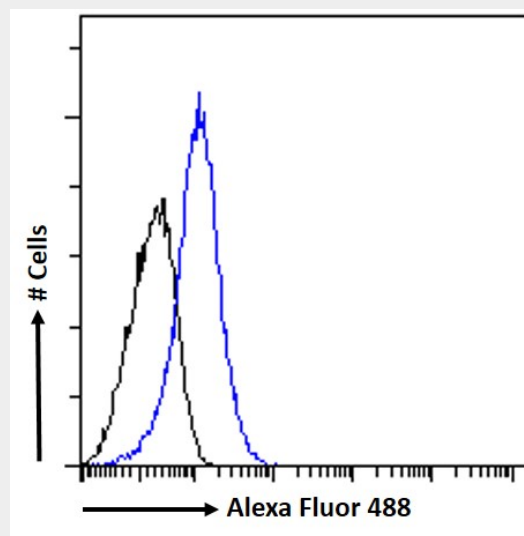
AF1537a (0.2 µg/ml) staining of Human Kidney lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1537a (3.8 µg/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.