

#### **Goat Anti-DLX5 Antibody**

Peptide-affinity purified goat antibody Catalog # AF1331a

# **Specification**

## **Goat Anti-DLX5 Antibody - Product Information**

Application WB
Primary Accession P56178

Other Accession NP 005212, 1749, 13395 (mouse), 25431 (rat)

Reactivity Huma

Predicted Mouse, Rat, Cow

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 31540

# **Goat Anti-DLX5 Antibody - Additional Information**

#### **Gene ID 1749**

#### **Other Names**

Homeobox protein DLX-5, DLX5

#### **Format**

0.5 mg lgG/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-DLX5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Goat Anti-DLX5 Antibody - Protein Information**

#### Name DLX5

## **Function**

Transcriptional factor involved in bone development. Acts as an immediate early BMP-responsive transcriptional activator essential for osteoblast differentiation. Stimulates ALPL promoter activity in a RUNX2-independent manner during osteoblast differentiation. Stimulates SP7 promoter activity during osteoblast differentiation. Promotes cell proliferation by up-regulating MYC promoter activity. Involved as a positive regulator of both chondrogenesis and chondrocyte hypertrophy in the endochondral skeleton. Binds to the homeodomain-response element of the



ALPL and SP7 promoter. Binds to the MYC promoter. Requires the 5'-TAATTA-3' consensus sequence for DNA-binding.

**Cellular Location** 

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108}.

## Goat Anti-DLX5 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 Cytomety
- Cell Culture

## Goat Anti-DLX5 Antibody - Images



AF1331a (1  $\mu$ g/ml) staining of Human Bone Marrow lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

## Goat Anti-DLX5 Antibody - Background

This gene encodes a member of a homeobox transcription factor gene family similiar to the Drosophila distal-less gene. The encoded protein may play a role in bone development and fracture healing. Mutation in this gene, which is located in a tail-to-tail configuration with another member of the family on the long arm of chromosome 7, may be associated with split-hand/split-foot malformation.

# Goat Anti-DLX5 Antibody - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.

DLX5 (distal-less homeobox 5) promotes tumor cell proliferation by transcriptionally regulating MYC. Xu J, et al. J Biol Chem, 2009 Jul 31. PMID 19497851.

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. Expression analysis and mutation detection of DLX5 and DLX6 in autism. Nakashima N, et al. Brain





Dev, 2010 Feb. PMID 19195802.

Activation of placenta-specific transcription factor distal-less homeobox 5 predicts clinical outcome in primary lung cancer patients. Kato T, et al. Clin Cancer Res, 2008 Apr 15. PMID 18413826.