**BACKGROUND**

Dlx genes are a highly conserved family of six different (Dlx1-6) homeobox-containing genes that share homology with distal-less (Dll), a gene expressed in the head and limbs of the developing fruit fly. Dlx genes are expressed in spatially and temporally restricted patterns in craniofacial primordia, basal telencephalon and diencephalon, and in distal regions of extending appendages, including the limb and the genital bud. The differential expression of Dlx influences patterning, morphogenesis and histogenesis in these tissues. The Dlx gene products can activate transcription and are localized primarily to the nucleus, although Dlx-5 can be found in the cytoplasm. Dlx proteins influence different stages of proper tissue development, including patterning of the orofacial skeleton (craniofacial ectomesenchyme) and differentiation of structures within and between teeth.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DLX5 (human) mapping to 7q21.3; Dlx5 (mouse) mapping to 6 A1.

**SOURCE**

Dlx-5 (H-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 98-127 within an internal region of Dlx-5 of human origin.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PRODUCT**

Each vial contains 200 µg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Shift and ChIP applications, sc-398150 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-398150 P, 100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA.

**APPLICATIONS**

Dlx-5 (H-4) is recommended for detection of Dlx-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50:1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30:1:3000).


Molecular Weight of Dlx-5: 35 kDa.

Positive Controls: COLO 205 whole cell lysate: sc-364177, RAW 264.7 whole cell lysate: sc-2211 or HL-60 whole cell lysate: sc-2209.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgM-HRP: sc-2064 (dilution range: 1:500-1:5,000), TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L PLUS-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgM-FITC: sc-2082 (dilution range: 1:100-1:400) or goat anti-mouse IgM-TR: sc-2983 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

![Western Blot Analysis](image1)

Dlx-5 (H-4): sc-398150. Western blot analysis of Dlx-5 expression in COLO 205 (A), RAW 264.7 (B) and HL-60 (C) whole cell lysates.

![Immunofluorescence Staining](image2)

Dlx-5 (H-4): sc-398150. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.