

Dlx-6 (P-21): sc-133516

BACKGROUND

Dlx genes are a highly conserved family of six different (Dlx1–6) homeo box-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

1. Weiss, K.M., et al. 1995. Dlx and other homeobox genes in the morphological development of the dentition. *Connect. Tissue Res.* 32: 35-40.
2. Davideau, J.L., et al. 1999. Expression of DLX5 during human embryonic craniofacial development. *Mech. Dev.* 81: 183-186.
3. Depew, M.J., et al. 1999. Dlx5 regulates regional development of the branchial arches and sensory capsules. *Development* 126: 3831-3846.
4. Eisenstat, D.D., et al. 1999. DLX-1, DLX-2, and DLX-5 expression define distinct stages of basal forebrain differentiation. *J. Comp. Neurol.* 414: 217-237.
5. Bendall, A.J., et al. 2000. Roles for Msx and Dlx homeoproteins in vertebrate development. *Gene* 247: 17-31.
6. Merlo, G.R., et al. 2000. Multiple functions of Dlx genes. *Int. J. Dev. Biol.* 44: 619-626.
7. LocusLink Report (LocusID: 1746). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: DLX6 (human) mapping to 7q21.3; Dlx6 (mouse) mapping to 6 A1.

SOURCE

Dlx-6 (P-21) is an affinity purified rabbit polyclonal antibody raised against synthetic Dlx-6 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

Dlx-6 (P-21) is recommended for detection of Dlx-6 of mouse, rat, human, zebrafish and canine and zebrafish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Dlx-6 siRNA (h): sc-38659, Dlx-6 siRNA (m): sc-38660, Dlx-6 shRNA Plasmid (h): sc-38659-SH, Dlx-6 shRNA Plasmid (m): sc-38660-SH, Dlx-6 shRNA (h) Lentiviral Particles: sc-38659-V and Dlx-6 shRNA (m) Lentiviral Particles: sc-38660-V.

Molecular Weight (predicted) of Dlx-6: 20 kDa.

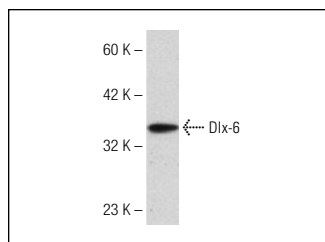
Molecular Weight (observed) of Dlx-6: 35 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Dlx-6 (P-21): sc-133516. Western blot analysis of Dlx-6 expression in Jurkat whole cell lysate.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.