

# Dlx-3 (H-80): sc-98522

## 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

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- Davideau, J.L., Demri, P., Gu, T.T., Simmons, D., Nessman, C., Forest, N., MacDougall, M. and Berdal, A. 1999. Expression of Dlx-5 during human embryonic craniofacial development. *Mech. Dev.* 81: 183-186.
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- Eisenstat, D.D., Liu, J.K., Mione, M., Zhong, W., Yu, G., Anderson, S.A., Ghattas, I., Puellas, L. and Rubenstein, J.L. 1999. Dlx-1, Dlx-2, and Dlx-5 expression define distinct stages of basal forebrain differentiation. *J. Comp. Neurol.* 414: 217-237.
- Bendall, A.J. and Abate-Shen, C. 2000. Roles for Msx and Dlx homeoproteins in vertebrate development. *Gene* 247: 17-31.
- Merlo, G.R., Zerega, B., Paleari, L., Trombino, S., Mantero, S. and Levi, G. 2000. Multiple functions of Dlx genes. *Int. J. Dev. Biol.* 44: 619-626.
- LocusLink Report (LocusID: 1746). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: DLX3 (human) mapping to 17q21.33; Dlx3 (mouse) mapping to 11 D.

## SOURCE

Dlx-3 (H-80) is a rabbit polyclonal antibody raised against amino acids 208-287 mapping at the C-terminus of Dlx-3 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Dlx-3 (H-80) is recommended for detection of Dlx-3 of mouse, rat and human 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)], 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).

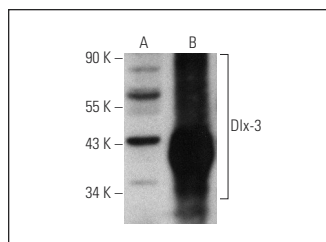
Dlx-3 (H-80) is also recommended for detection of Dlx-3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Dlx-3 siRNA (h): sc-38653, Dlx-3 siRNA (m): sc-38654, Dlx-3 shRNA Plasmid (h): sc-38653-SH, Dlx-3 shRNA Plasmid (m): sc-38654-SH, Dlx-3 shRNA (h) Lentiviral Particles: sc-38653-V and Dlx-3 shRNA (m) Lentiviral Particles: sc-38654-V.

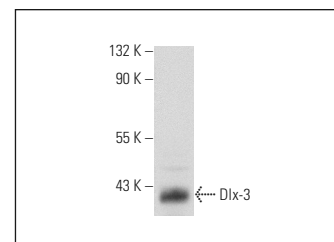
Molecular Weight of Dlx-3: 38-39 kDa.

Positive Controls: Dlx-3 (h): 293T Lysate: sc-113948 or JEG-3 whole cell lysate: sc-364255.

## DATA



Dlx-3 (H-80): sc-98522. Western blot analysis of Dlx-3 expression in non-transfected: sc-117752 (A) and human Dlx-3 transfected: sc-113948 (B) 293T whole cell lysates.



Dlx-3 (H-80): sc-98522. Western blot analysis of Dlx-3 expression in JEG-3 whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Dlx-3 (B-5): sc-514094** or **Dlx-3 (3-RE45): sc-134317**, our highly recommended monoclonal alternatives to Dlx-3 (H-80).