

Dlx-2 (h): 293T Lysate: sc-115316

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., Ruddle, F.H. and Bollekens, J. 1995. Dlx and other homeobox genes in the morphological development of the dentition. *Connect. Tissue Res.* 32: 35-40.
2. 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.
3. Depew, M.J., Liu, J.K., Long, J.E., Presley, R., Meneses, J.J., Pedersen, R.A. and Rubenstein, J.L. 1999. Dlx-5 regulates regional development of the branchial arches and sensory capsules. *Development* 126: 3831-3846.
4. 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.
5. Bendall, A.J. and Abate-Shen, C. 2000. Roles for Msx and Dlx homeoproteins in vertebrate development. *Gene* 247: 17-31.
6. 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.
7. LocusLink Report (LocusID: 1746). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: DLX2 (human) mapping to 2q31.1.

PRODUCT

Dlx-2 (h): 293T Lysate represents a lysate of human Dlx-2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Dlx-2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Dlx-2 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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