

Dlx-1 (C-18): sc-324846

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-1 (distal-less homeobox 1), also known as Distal-less, is a 255 amino acid protein that is essential for progenitors to differentiate into GABAergic (secreting or transmitting of γ -aminobutyric acid) neurons. 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. Dlx-1 is 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-1 influences patterning, morphogenesis and histogenesis in these tissues. Due to its ability to influence transcription, Dlx-1 is thought to regulate a transcriptional hierarchy that controls neuron versus oligodendroglial cell fate within a progenitor.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DLX1 (human) mapping to 2q31.1; Dlx1 (mouse) mapping to 2 C2.

SOURCE

Dlx-1 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Dlx-1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-324846 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-324846 X, 200 μ g/0.1 ml.

APPLICATIONS

Dlx-1 (C-18) is recommended for detection of Dlx-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other Dlx family members.

Dlx-1 (C-18) is also recommended for detection of Dlx-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Dlx-1 siRNA (h): sc-105301, Dlx-1 siRNA (m): sc-143058, Dlx-1 shRNA Plasmid (h): sc-105301-SH, Dlx-1 shRNA Plasmid (m): sc-143058-SH, Dlx-1 shRNA (h) Lentiviral Particles: sc-105301-V and Dlx-1 shRNA (m) Lentiviral Particles: sc-143058-V.

Dlx-1 (C-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Dlx-1: 27 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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