# SANTA CRUZ BIOTECHNOLOGY, INC.

# Dlx-6 (C-20): sc-18155



### BACKGROUND

Dlx genes are a highly conserved family of six different (Dlx1-6) homeo boxcontaining genes that share homology with distal-less (DII), 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.

## CHROMOSOMAL LOCATION

Genetic locus: DLX6 (human) mapping to 7q21.3; DIx6 (mouse) mapping to 6 A1.

#### SOURCE

DIx-6 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DIx-6 of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-18155 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-18155 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Dlx-6 (C-20) is recommended for detection of Dlx-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

DIx-6 (C-20) is also recommended for detection of DIx-6 in additional species, including equine, canine, bovine and avian.

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

DIx-6 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

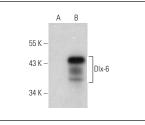
Molecular Weight (observed) of DIx-6: 35 kDa.

Positive Controls: Dlx-6 (m): 293 Lysate: sc-178527.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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). 3) 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



DIx-6 (C-20): sc-18155. Western blot analysis of DIx-6 expression in non-transfected: sc-110760 (**A**) and mouse DIx-6 transfected: sc-178527 (**B**) 293 whole cell lysates.

#### SELECT PRODUCT CITATIONS

- Gaasch, J.A., et al. 2006. Hepatocyte growth factor-regulated genes in differentiated Raw 264.7 osteoclast and undifferentiated cells. Gene 369: 142-152.
- Tan, Y., et al. 2008. A novel recurrent chromosomal inversion implicates the homeobox gene DIx-5 in T-cell lymphomas from Lck-Akt2 transgenic mice. Cancer Res. 68: 1296-1302.

#### **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.

MONOS Satisfation Guaranteed

Try **DIx-6 (2D7): sc-517058**, our highly recommended monoclonal alternative to DIx-6 (C-20).