



## IRX6 (S-14): sc-107653

### BACKGROUND

The Iroquois homeobox gene family of transcription factors regulate various aspects of embryonic development, including anterior/posterior and dorsal/ventral axis patterning and regionalization in both vertebrate and invertebrate central nervous systems. The Iroquois family is comprised of two groups termed IRXA and IRXB, which map to chromosomes 8 and 13 in mice. The IRXA group includes IRX1, IRX2 and IRX4, and the IRXB group consists of IRX3, IRX5 and IRX6. IRX6 (Iroquois related homeobox 6), also known as IRXB3 (homeodomain protein IRXB3), is a 438 amino acid nuclear protein belonging to the Iroquois homeobox family. IRX6 contains one homeobox DNA-binding domain and is encoded by a gene located on mouse chromosome 8 C5.

### REFERENCES

- Christoffels, V.M., Keijser, A.G., Houweling, A.C., Clout, D.E. and Moorman, A.F. 2000. Patterning the embryonic heart: identification of five mouse Iroquois homeobox genes in the developing heart. *Dev. Biol.* 224: 263-274.
- Peters, T., Dildrop, R., Ausmeier, K. and R  ther, U. 2000. Organization of mouse Iroquois homeobox genes in two clusters suggests a conserved regulation and function in vertebrate development. *Genome Res.* 10: 1453-1462.
- Ogura, K., Matsumoto, K., Kuroiwa, A., Isobe, T., Otoguro, T., Jurecic, V., Baldini, A., Matsuda, Y. and Ogura, T. 2001. Cloning and chromosome mapping of human and chicken Iroquois (IRX) genes. *Cytogenet. Cell Genet.* 92: 320-325.
- Cavodeassi, F., Modolell, J. and G  mez-Skarmeta, J.L. 2001. The Iroquois family of genes: from body building to neural patterning. *Development* 128: 2847-2855.
- Mummenhoff, J., Houweling, A.C., Peters, T., Christoffels, V.M. and R  ther, U. 2001. Expression of IRX6 during mouse morphogenesis. *Mech. Dev.* 103: 193-195.
- Houweling, A.C., Dildrop, R., Peters, T., Mummenhoff, J., Moorman, A.F., R  ther, U. and Christoffels, V.M. 2001. Gene and cluster-specific expression of the Iroquois family members during mouse development. *Mech. Dev.* 107: 169-174.
- Online Mendelian Inheritance in Man, OMIM<sup>TM</sup>. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 606197. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

### CHROMOSOMAL LOCATION

Genetic locus: IRX6 (human) mapping to 16q12.2.

### SOURCE

IRX6 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IRX6 of human origin.

### STORAGE

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

### PRODUCT

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

Blocking peptide available for competition studies, sc-107653 P, (100   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-107653 X, 200   g/0.1 ml.

### APPLICATIONS

IRX6 (S-14) is recommended for detection of IRX6 of 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).

Suitable for use as control antibody for IRX6 siRNA (h): sc-93386, IRX6 shRNA Plasmid (h): sc-93386-SH and IRX6 shRNA (h) Lentiviral Particles: sc-93386-V.

IRX6 (S-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of IRX6: 47 kDa.

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

### 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.