

IRX3 (M-147): sc-30157

BACKGROUND

The Iroquois homeobox gene family of transcription factors regulate aspects of embryonic development including anterior/posterior and dorsal/ventral axis patterning in the central nervous system. The Iroquois family are clustered on two loci, IRXA and IRXB, which map to chromosomes 8 and 13 in mice. The IRXA group includes IRX, IRX2 and IRX4; the IRXB group comprises IRX3, IRX5 and IRX6. IRX1 and IRX2 are both widely expressed during development in the lung epithelium and also in the ventricular septum. IRX1 and IRX2 also play a role in digit formation (E11.5-E14.5). The IRX gene family members are each expressed in a distinct pattern during mouse heart development. Specifically, IRX1 and IRX2 are expressed in the ventricular septum and IRX3 is expressed in the ventricular trabeculated myocardium. In addition, IRX4 is expressed in the linear heart tube and the AV canal; IRX5 is expressed in the endocardium lining the ventricular and atrial myocardium. Furthermore, the IRX4 gene may modulate cardiac development and function. Although the heart of IRX4⁻ mice appears to develop normally, adult IRX4⁻ mice exhibit cardiomyopathy, including cardiac hypertrophy and decreased contractility.

CHROMOSOMAL LOCATION

Genetic locus: IRX3 (human) mapping to 16q12.2; Irx3 (mouse) mapping to 8 C5.

SOURCE

IRX3 (M-147) is a rabbit polyclonal antibody raised against amino acids 361-507 mapping at the C-terminus of IRX3 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG 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-30157 X, 200 µg/0.1 ml.

APPLICATIONS

IRX3 (M-147) is recommended for detection of IRX3 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). IRX3 (M-147) is also recommended for detection of IRX3 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for IRX3 siRNA (h): sc-106756, IRX3 siRNA (m): sc-38704, IRX3 shRNA Plasmid (h): sc-106756-SH, IRX3 shRNA Plasmid (m): sc-38704-SH, IRX3 shRNA (h) Lentiviral Particles: sc-106756-V and IRX3 shRNA (m) Lentiviral Particles: sc-38704-V.

IRX3 (M-147) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of IRX3: 52 kDa.

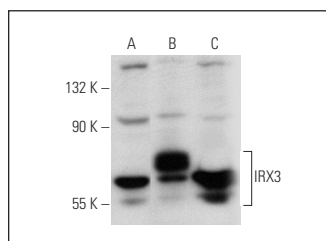
Molecular Weight (observed) of IRX3: 61 kDa.

Positive Controls: IRX3 (h): 293T Lysate: sc-173075, Sol8 nuclear extract: sc-2157 or HeLa nuclear extract: sc-2120.

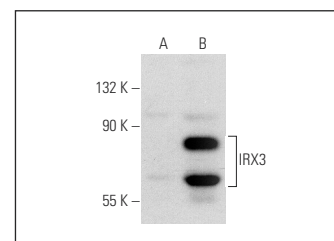
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IRX3 (M-147): sc-30157. Western blot analysis of IRX3 expression in non-transfected: sc-117752 (A) and human IRX3 transfected: sc-173075 (B) 293T whole cell lysates and HeLa nuclear extract (C).



IRX3 (M-147): sc-30157. Western blot analysis of IRX3 expression in non-transfected: sc-117752 (A) and human IRX3 transfected: sc-173324 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Corti, S., et al. 2007. Neural stem cells LewisX⁺ CXCR4⁺ modify disease progression in an amyotrophic lateral sclerosis model. *Brain* 130: 1289-1305.
2. Kahr, P.C., et al. 2011. Systematic analysis of gene expression differences between left and right atria in different mouse strains and in human atrial tissue. *PLoS ONE* 6: e26389.

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
Satisfaction
Guaranteed

Try **IRX3 (G-6): sc-166877** or **IRX3 (F-8): sc-166657**, our highly recommended monoclonal alternatives to IRX3 (M-147).