SANTA CRUZ BIOTECHNOLOGY, INC.

Hox11 (H-50): sc-28601

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Hox proteins play a role in patterns of embryonic development and cellular differentiation by regulating downstream target genes. The Hox11 gene, termed an orphan homeobox gene, as it is located outside of the four mammalian Hox clusters, is a DNA-binding nuclear transcription factor. The human Hox11 gene maps to chromosome 10q24.31 and has been implicated in the chromosomal translocation t(7;10)(q24;q11) that occurs in T cell acute lymphoblastic leukemia (T-ALL). The t(7:10) translocation occurs between the Hox11 gene and the T cell receptor (TCR) δ-chain gene and is a result of aberrant physiological recombinational events at the early stages of T cell development. The Hox11 gene is normally expressed in the splanchnic anlage arising from the splanchnic mesoderm. Homozygous Hox11-deficient mice have no spleen, while all other splanchnic derivatives develop normally. Spleen development starts and proceeds normally in Hox11-deficient mice to a specific stage of embryogenesis, when the spleen anlage becomes fully absorbed.

CHROMOSOMAL LOCATION

Genetic locus: TLX1 (human) mapping to 10q24.31; Tlx1 (mouse) mapping to 19 C3.

SOURCE

Hox11 (H-50) is a rabbit polyclonal antibody raised against amino acids 31-80 mapping near the N-terminus of Hox11 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.nAlso available as TransCruz reagent for Gel Supershift and ChIP applications, sc-28601 X, 200 µg/0.1 ml.

RESEARCH USE

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

APPLICATIONS

Hox11 (H-50) is recommended for detection of Hox11 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).

Suitable for use as control antibody for Hox11 siRNA (h): sc-38700, Hox11 siRNA (m): sc-38701, Hox11 shRNA Plasmid (h): sc-38700-SH, Hox11 shRNA Plasmid (m): sc-38701-SH, Hox11 shRNA (h) Lentiviral Particles: sc-38700-V and Hox11 shRNA (m) Lentiviral Particles: sc-38701-V.

Hox11 (H-50) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

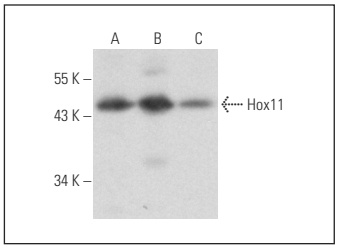
Molecular Weight of Hox11: 40 kDa.

Positive Controls: KNRK nuclear extract: sc-2141, PC-3 nuclear extract: sc-2152 or Sol8 nuclear extract: sc-2157.

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



Hox11 (H-50): sc-28601. Western blot analysis of Hox11 expression in KNRK (**A**), PC-3 (**B**) and Sol8 (**C**) nuclear extracts.

STORAGE

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

PROTOCOLS

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