**TLX3 (34-L): sc-81990**

**BACKGROUND**

Members of the TLX homeobox gene family are expressed in the developing hindbrain; specifically, the TLX3 gene is expressed in the developing dorsal and ventral medulla oblongata. The TLX3 gene is required for formation of first-order relay visceral sensory neurons in the brainstem. Development of most nor-adrenergic centers is compromised in both TLX3- and Phox2b-deficient mice. The TLX3 and Phox2 proteins have independent functions in specifying the nor-adrenergic phenotype. TLX3-deficient newborn mice have a high rate of respiration, a decreased duration of inspiration and frequent apnea; they die shortly after birth from central respiratory failure. In both chick and mouse embryos, TLX3 expression occurs in two longitudinal stripes of postmitotic neurons in the developing hindbrain and spinal cord. Implicated in T-ALL (T cell acute lymphoblastic leukemia), the t(5:14)(q35;q32) translocation increases transcription of the TLX3 gene.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TLX3 (human) mapping to 5q35.1; Tlx3 (mouse) mapping to 11 A4.

**APPLICATIONS**

TLX3 (34-L) is recommended for detection of TLX3 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TLX3 siRNA (h): sc-38804, TLX3 siRNA (m): sc-38805, TLX3 shRNA Plasmid (h): sc-38804-SH, TLX3 shRNA Plasmid (m): sc-38805-SH, TLX3 shRNA (h) Lentiviral Particles: sc-38804-V and TLX3 shRNA (m) Lentiviral Particles: sc-38805-V.

Molecular Weight of TLX3: 32 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or TLX3 (h): 293 Lysate: sc-173065.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ HRP: sc-516102 or m-IgGκ HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

TLX3 (34-L): sc-81990. Western blot analysis of TLX3 expression in non-transfected: sc-110760 (A) and human TLX3 transfected: sc-173065 (B) 293 whole cell lysates.

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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