FOXN2 (L-20): sc-67490



The Power to Question

BACKGROUND

The forkhead domain-containing gene family (Fox) comprises over 20 members in mammals and is defined by a conserved 110 amino-acid motif containing a winged helix structure DNA-binding domain. The members of this gene family have been implicated as key regulators of embryogenesis, cell cycling, cell lineage restriction and cancer. As such, FOXN2 contains a domain with homology to the forkhead DNA binding domain. FOXN2, or human T-cell leukemia virus enhancer factor, is a 341 amino acid protein mapping to human gene FOXN2, which has been localized to human chromosome 2p16.3. This protein, encoded by a 1239-bp cDNA isolated from the Jurkat cDNA library, is capable of binding to a region of the human T-cell leukemia virus long terminal repeat (HTLV-I LTR) located between amino acids 155 and 117. This purine-rich region is important in the regulation of gene expression by the Ets family of transcription factors. FOXN2 is a unique cellular gene that may function in the transcriptional regulation of HTLV-I LTR.

REFERENCES

- Li, C., et al. 1992. Character-ization and chromosomal mapping of the gene encoding the cellular DNA binding protein HTLF. Genomics 13: 658-664.
- Schlake, T., et al. 2000. Formation of regulator/target gene relationships during evolution. Gene 256: 29-34.
- 3. Ariyama, Y., et al. 2000. Chro-mosomal imbalances in adult T-cell leukemia revealed by comparative genomic hybridization: gains at 14q and 2p16-22 in cell lines. J. Hum. Genet. 44: 357-363.
- Boehm, T., et al. 2003. Genetic dissection of thymus development in mouse and zebrafish. Immunol. Rev. 195: 15-27.
- Katoh, M., et al. 2004. Characterization of human FOXN4 gene in silico. Int. J. Mol. Med. 14: 949-953.
- Katoh, M., et al. 2004. Human FOX gene family (Review). Int. J. Oncol. 25: 1495-1500.
- Schuff, M., et al. 2006. Temporal and spatial expression patterns of FOXN genes in Xenopus laevis embryos. Int. J. Dev. Biol. 50: 429-434.

CHROMOSOMAL LOCATION

Genetic locus: FOXN2 (human) mapping to 2p16.3; Foxn2 (mouse) mapping to 17 E4.

SOURCE

FOXN2 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FOXN2 of mouse origin.

PRODUCT

Each vial contains 200 μ 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-67490 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-67490 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FOXN2 (L-20) is recommended for detection of FOXN2 of mouse and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

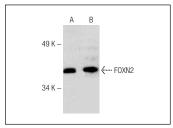
Suitable for use as control antibody for FOXN2 siRNA (h): sc-62341, FOXN2 siRNA (m): sc-62342, FOXN2 shRNA Plasmid (m): sc-62342-SH, OXN2 shRNA Plasmid (h): sc-62341-SH, FOXN2 shRNA (m) Lentiviral Particles: sc-62342-V and FOXN2 shRNA (h) Lentiviral Particles: sc-62341-V.

FOXN2 (L-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

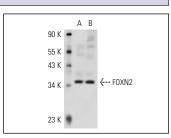
Molecular Weight of FOXN2: 37 kDa.

Positive Controls: TK-1 Whole Cell Lysate : sc-364798, RAW 264.7 whole cell lysate: sc-2211 or NIH/3T3 whole cell lysate: sc-2210.

DATA







FOXN2 (L-20): sc-67490. Western blot analysis of FOXN2 expression in RAW 264.7 (**A**) and NIH/3T3 (**B**) nuclear extracts.

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.



Try **FOXN2 (D-4): sc-514664**, our highly recommended monoclonal alternative to FOXN2 (L-20).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com