

FOXQ1 (h): 293T Lysate: sc-116439

BACKGROUND

The FOX family of transcription factors share a common DNA binding domain termed a winged-helix or forkhead domain. Many FOX proteins play important roles in development, metabolism, cancer and aging. FOXQ1 is mutant in satin homozygous mice. Satin mice are characterized by having silky coats with high sheen as a result of structurally abnormal medulla cells and defects in the differentiation of the hair shaft. Satin mice also display suppressed natural killer cell function and alloimmune cytotoxic T-cell function, which implicates FOXQ1 in lymphocyte development. FOXQ1 is predominantly expressed during embryogenesis and in a tissue-restricted expression pattern in adult tissues, including stomach, trachea, bladder and salivary gland. FOXQ1 is overexpressed in colorectal adenocarcinoma and lung carcinoma cell lines.

REFERENCES

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2. Bieller, A., et al. 2001. Isolation and characterization of the human forkhead gene FOXQ1. *DNA Cell Biol.* 20: 555-561.
3. Hong, H.K., et al. 2001. The winged helix/forkhead transcription factor FOXQ1 regulates differentiation of hair in satin mice. *Genesis* 29: 163-171.
4. Katoh, M. and Katoh, M. 2004. Human FOX gene family (review). *Int. J. Oncol.* 25: 1495-1500.
5. Jonsson, H. and Peng, S.L. 2005. Forkhead transcription factors in immunology. *Cell. Mol. Life Sci.* 62: 397-409.
6. Potter, C.S., et al. 2006. Evidence that the satin hair mutant gene FOXQ1 is among multiple and functionally diverse regulatory targets for HoxC13 during hair follicle differentiation. *J. Biol. Chem.* 281: 29245-29255.

CHROMOSOMAL LOCATION

Genetic locus: FOXQ1 (human) mapping to 6p25.3.

PRODUCT

FOXQ1 (h): 293T Lysate represents a lysate of human FOXQ1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

FOXQ1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FOXQ1 antibodies. Recommended use: 10-20 µl per lane.

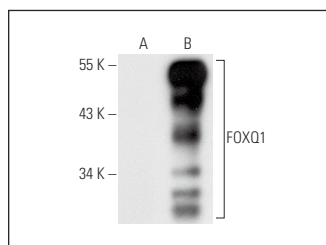
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FOXQ1 (H-11): sc-166264 is recommended as a positive control antibody for Western Blot analysis of enhanced human FOXQ1 expression in FOXQ1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-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.

DATA



FOXQ1 (H-11): sc-166264. Western blot analysis of FOXQ1 expression in non-transfected: sc-117752 (A) and human FOXQ1 transfected: sc-116439 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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