

FOXQ1 (B-4): sc-166266

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.

CHROMOSOMAL LOCATION

Genetic locus: FOXQ1 (human) mapping to 6p25.3; Foxq1 (mouse) mapping to 13 A3.2.

SOURCE

FOXQ1 (B-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 176-202 within an internal region of FOXQ1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain 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-166266 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-166266 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

FOXQ1 (B-4) is recommended for detection of FOXQ1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 FOXQ1 siRNA (h): sc-60660, FOXQ1 siRNA (m): sc-60661, FOXQ1 shRNA Plasmid (h): sc-60660-SH, FOXQ1 shRNA Plasmid (m): sc-60661-SH, FOXQ1 shRNA (h) Lentiviral Particles: sc-60660-V and FOXQ1 shRNA (m) Lentiviral Particles: sc-60661-V.

FOXQ1 (B-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

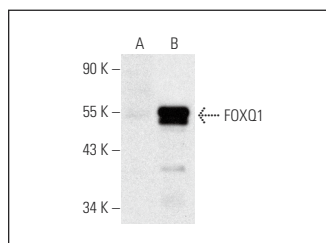
Molecular Weight of FOXQ1: 41 kDa.

Positive Controls: FOXQ1 (h): 293T Lysate: sc-116439, FOXQ1 (m): 293T Lysate: sc-120313 or HeLa whole cell lysate: sc-2200.

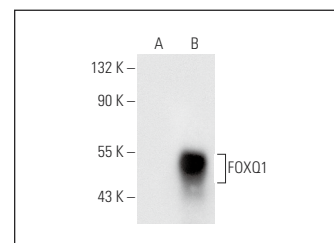
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FOXQ1 (B-4): sc-166266. Western blot analysis of FOXQ1 expression in non-transfected: sc-117752 (A) and human FOXQ1 transfected: sc-116439 (B) 293T whole cell lysates.



FOXQ1 (B-4): sc-166266. Western blot analysis of FOXQ1 expression in non-transfected: sc-117752 (A) and mouse FOXQ1 transfected: sc-120313 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Yonemori, K., et al. 2017. The microRNA expression signature of pancreatic ductal adenocarcinoma by RNA sequencing: anti-tumour functions of the microRNA-216 cluster. *Oncotarget* 8: 70097-70115.
- Luo, Y., et al. 2021. FOXQ1 promotes metastasis of nasopharyngeal carcinoma by inducing vasculogenic mimicry via the EGFR signaling pathway. *Cell Death Dis.* 12: 411.

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 for detailed protocols and support products.