BACKGROUND

The Forkhead-box (FOX) genes comprise a superfamily of at least 43 members that express proteins which are involved in transcriptional regulation and may be associated with the pathogenesis of various cancers. FOXR2 (forkhead box protein R2), also known as FOXD6 (forkhead box protein D6), is a 311 amino acid nuclear protein that belongs to the FOX family and contains one fork-head DNA-binding domain. Like other members of the FOX family, FOXR2 is not abundantly expressed in normal tissues but is found at very high levels in breast cancer and primary cancer cell lines and is thought to act as a transcription factor. Through chromosomal aberrations such as retroviral integration, gene amplification or translocation, FOXR2 may be involved in the development of certain invasive carcinomas.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: FOXR2 (human) mapping to Xp11.21.

SOURCE

FOXR2 (2C1) is a mouse monoclonal antibody raised against amino acids 1-311 representing full length FOXR2 of human origin.

PRODUCT

Each vial contains 100 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FOXR2 (2C1) is recommended for detection of FOXR2 of 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), immunohistochemistry (including paraffin-embedded sections) (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 FOXR2 siRNA (h): sc-90964, FOXR2 shRNA Plasmid (h): sc-90964-SH and FOXR2 shRNA (h) Lentiviral Particles: sc-90964-V.

Molecular Weight of FOXR2: 36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

FOXR2 (2C1): sc-517037. Western blot analysis of FOXR2 expression in HeLa whole cell lysate.

FOXR2 (2C1): sc-517037. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear staining of trophoblastic cells (A). Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (B).

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 for detailed protocols and support products.