

FOXR1 (E-14)-R: sc-138940-R

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. FOX family members are monomeric, helix-turn-helix proteins with a core DNA-binding domain of approximately 110 amino acids. FOX transcription factors play roles in determining cell fate during early development. FOXR1 (forkhead box protein R1), also known as FOXN5 (forkhead box protein N5) or DLNB13, is a 292 amino acid nuclear protein that belongs to the FOX family and contains one forkhead DNA-binding domain. Through chromosomal aberrations such as retroviral integration, gene amplification or translocation, FOXR1 may be involved the development of certain invasive carcinomas.

REFERENCES

1. Katoh, M., et al. 2004. Identification and characterization of human FOXK1 gene in silico. *Int. J. Mol. Med.* 14: 127-132.
2. Katoh, M., et al. 2004. Germ-line mutation of Foxn5 gene in mouse lineage. *Int. J. Mol. Med.* 14: 463-467.
3. Katoh, M., et al. 2004. Characterization of human FOXN4 gene in silico. *Int. J. Mol. Med.* 14: 949-953.
4. Katoh, M., et al. 2004. Identification and characterization of human FOXN5 and rat Foxn5 genes in silico. *Int. J. Oncol.* 24: 1339-1344.
5. Katoh, M., et al. 2004. Identification and characterization of human FOXN6, mouse Foxn6, and rat Foxn6 genes in silico. *Int. J. Oncol.* 25: 219-223.
6. Katoh, M., et al. 2004. Human FOX gene family (Review). *Int. J. Oncol.* 25: 1495-1500.
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CHROMOSOMAL LOCATION

Genetic locus: FOXR1 (human) mapping to 11q23.3.

SOURCE

FOXR1 (E-14)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FOXR1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138940 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

FOXR1 (E-14)-R is recommended for detection of FOXR1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with FOXR2.

Suitable for use as control antibody for FOXR1 siRNA (h): sc-96463, FOXR1 shRNA Plasmid (h): sc-96463-SH and FOXR1 shRNA (h) Lentiviral Particles: sc-96463-V.

Molecular Weight of FOXR1: 33 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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