

FO XK1 (H-140): sc-134550

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. In skeletal muscles, undifferentiated myogenic stem cells (satellite cells) can mobilize to regenerate myofibers in response to injury. FOXK1 is expressed in these cells and regulates cell cycle progression through an interaction with its downstream target the cyclin-dependent kinase inhibitor p21^{CIP}. Loss of FOXK1 in mice results in growth retardation and a severe impairment in skeletal muscle regeneration following injury. FOXK1 also shows expression in immature tissues of brain, eye, heart, lung and thymus. It also is predominantly expressed in many malignant tissues, such as tumors of the brain, colon and lymph node.

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CHROMOSOMAL LOCATION

Genetic locus: FOXK1 (human) mapping to 7p22.1; Foxk1 (mouse) mapping to 5 G2.

SOURCE

FOXK1 (H-140) is a rabbit polyclonal antibody raised against amino acids 472-611 mapping near the C-terminus of FOXK1 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μ g IgG 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-134550 X, 200 μ g/0.1 ml.

APPLICATIONS

FOXK1 (H-140) is recommended for detection of Forkhead box protein K1 of mouse, rat and 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), 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).

FOXK1 (H-140) is also recommended for detection of Forkhead box protein K1 in additional species, including equine, canine and porcine.

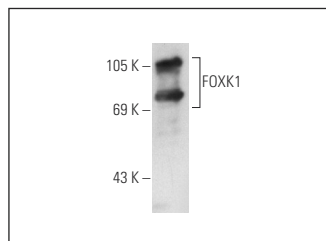
Suitable for use as control antibody for FOXK1 siRNA (h): sc-60657, FOXK1 siRNA (m): sc-60658, FOXK1 shRNA Plasmid (h): sc-60657-SH, FOXK1 shRNA Plasmid (m): sc-60658-SH, FOXK1 shRNA (h) Lentiviral Particles: sc-60657-V and FOXK1 shRNA (m) Lentiviral Particles: sc-60658-V.

FOXK1 (H-140) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

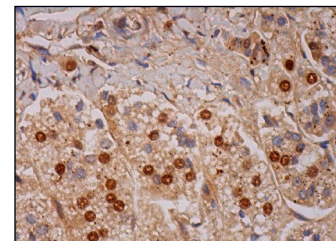
Molecular Weight of FOXK1: 90 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, HeLa nuclear extract: sc-2120 or A-673 nuclear extract: sc-2128.

DATA



FOXK1 (H-140): sc-134550. Western blot analysis of FOXK1 expression in NIH/3T3 whole cell lysate.



FOXK1 (H-140): sc-134550. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing nuclear and cytoplasmic staining of glandular cells.

RESEARCH USE

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

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Try **FOXK1 (G-4): sc-373810**, our highly recommended monoclonal alternative to FOXK1 (H-140).