

# AFX1 (H-80): sc-25359

## BACKGROUND

FKHR (for forkhead in rhabdomyosarcoma), FKHL1, and AFX1 are members of a subfamily of the forkhead family of transcription factors. AFX1 expression is detected in a wide variety of tissues, and, like other FKHR proteins, AFX1 contains a single fork-head domain and serine-proline-rich region which mediate DNA binding. AFX1-mediated transcriptional activation is regulated by the serine/threonine kinase Akt1, which phosphorylates AFX1 and, in turn, sequesters AFX1 in the cytosol, thereby, blocking nuclear localization and DNA binding. Genetic mutations in FKHR genes, including the t(2;13) and t(1;3) translocations, are commonly found in alveolar rhabdomyosarcomas. Additionally, the t(x;11) translocation of the AFX1 gene, which involves the fusion of a serine-proline-rich sequence of AFX1 to the carboxy terminus of a truncated MLL, results in acute lymphocytic leukemia.

## CHROMOSOMAL LOCATION

Genetic locus: FOXO4 (human) mapping to Xq13.1; Foxo4 (mouse) mapping to X C3.

## SOURCE

AFX1 (H-80) is a rabbit polyclonal antibody raised against amino acids 386-465 of AFX1 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-25359 X, 200 µg/0.1 ml.

## RESEARCH USE

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

## APPLICATIONS

AFX1 (H-80) is recommended for detection of AFX1 of mouse, rat and 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).

AFX1 (H-80) is also recommended for detection of AFX1 in additional species, including equine and canine.

Suitable for use as control antibody for AFX1 siRNA (h): sc-29650, AFX1 siRNA (m): sc-29651, AFX1 shRNA Plasmid (h): sc-29650-SH, AFX1 shRNA Plasmid (m): sc-29651-SH, AFX1 shRNA (h) Lentiviral Particles: sc-29650-V and AFX1 shRNA (m) Lentiviral Particles: sc-29651-V.

AFX1 (H-80) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

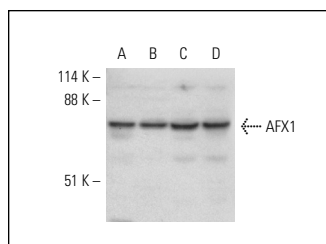
Molecular Weight of AFX1 isoforms: 54/48 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MM-142 cell lysate: sc-2246 or LADMAC whole cell lysate: sc-364189.

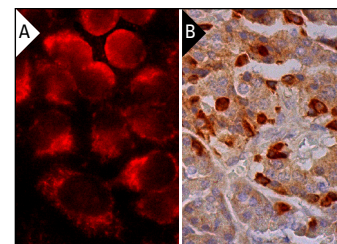
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



AFX1 (H-80): sc-25359. Western blot analysis of AFX1 expression in HeLa (A), MM-142 (B), LADMAC (C) and c4 (D) whole cell lysates.



AFX1 (H-80): sc-25359. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells and cytoplasmic and nuclear staining of Islets of Langerhans (B).

## SELECT PRODUCT CITATIONS

- Xiong, S., et al. 2011. FoxO1 mediates an autophagy feedback loop regulating SIRT1 expression. J. Biol. Chem. 286: 5289-5299.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **AFX1 (A-7): sc-373877**, our highly recommended monoclonal alternative to AFX1 (H-80).