Ac-FKHR (D-19): sc-49437

**BACKGROUND**

FKHR (for forkhead in rhabdomyosarcoma), FKHL1, FKHL1P1 and FKHRP1 compose a subfamily of the forkhead family of transcription factors. FKHR and FKHL1 are functional genes, whereas FKHL1P1 and FKHRP1 appear to be processed pseudogenes. Transcriptional activation of FKHR proteins is regulated by the serine/threonine kinase Akt1, which phosphorylates FKHR1, and results in FKHR1 associating with 14-3-3 proteins and being retained in the cytoplasm. Induction of apoptosis or withdrawal of growth factors stimulates dephosphorylation and nuclear translocation of FKHR proteins, leading to FKHR-induced gene-specific transcriptional activation. Genetic mutations in FKHR genes, including the t(2;13) and t(1;3) translocations, are commonly found in alveolar rhabdomyosarcomas. These translocations result in the fusion of the amino terminus of Pax-3 or Pax-7, including the paired box and homeodomain DNA-binding domains, with the carboxy-terminus of FKHR, which contains a transcriptional activation domain. The Pax-3/FKHR fusion protein appears to function as an oncogenic transcription factor that enhances the activation of normal Pax-3 target genes.

**CHROMOSOMAL LOCATION**

Genetic locus: FOXO1A (human) mapping to 13q14.11; Foxo1 (mouse) mapping to 3 C.

**SOURCE**

Ac-FKHR (D-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FKHR of mouse 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-49437 P, (100 µg per 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA).

**RESEARCH USE**

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

**APPLICATIONS**

Ac-FKHR (D-19) is recommended for detection of FKHR acetylated at residues Lys 259, Lys 262 and Lys 271 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:30-1:3000), may cross-reactive with acetylated FKHL1.

Ac-FKHR (D-19) is also recommended for detection of FKHR acetylated at residues Lys 259, Lys 262 and Lys 271 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FKHR siRNA (h): sc-35382, FKHR siRNA (m): sc-35383, FKHR shRNA Plasmid (h): sc-35382-SH, FKHR shRNA Plasmid (m): sc-35383-SH, FKHR shRNA (h) Lentiviral Particles: sc-35382-V and FKHR shRNA (m) Lentiviral Particles: sc-35383-V.

Molecular Weight of Ac-FKHR: 70 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.

**SELECT PRODUCT CITATION**


**STORAGE**

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