

FOXB1 (C-12): sc-131931

BACKGROUND

The Forkhead-box (FOX) genes comprise a superfamily of at least 43 members that encode proteins which are involved in transcriptional regulation and may be associated with the pathogenesis of various cancers. FOXB1 (forkhead box B1), also known as FKH5 or HFKH-5, and FOXB2 (forkhead box B2) are members of the FOX family and each contain one forkhead DNA-binding domain. Both FOXB1 and FOXB2 localize to the nucleus where they are thought to function as transcription factors that can bind to DNA via their forkhead domains. In mice, defects in the gene encoding FOXB1 are associated with retarded development of the central nervous system (CNS), suggesting that FOXB1 may play a role in CNS organization and function.

REFERENCES

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7. Pohl, B.S., et al. 2002. Sequence and expression of FoxB2 (XFD-5) and Foxl1c (XFD-10) in *Xenopus* embryogenesis. *Mech. Dev.* 117: 283-287.
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CHROMOSOMAL LOCATION

Genetic locus: FOXB1 (human) mapping to 15q22.2; Foxb1 (mouse) mapping to 9 D.

SOURCE

FOXB1 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FOXB1 of human origin.

RESEARCH USE

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

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-131931 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FOXB1 (C-12) is recommended for detection of FOXB1 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 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family member FOXB2.

Suitable for use as control antibody for FOXB1 siRNA (h): sc-90235, FOXB1 siRNA (m): sc-145219, FOXB1 shRNA Plasmid (h): sc-90235-SH, FOXB1 shRNA Plasmid (m): sc-145219-SH, FOXB1 shRNA (h) Lentiviral Particles: sc-90235-V and FOXB1 shRNA (m) Lentiviral Particles: sc-145219-V.

Molecular Weight of FOXB1: 35 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Hep G2 nuclear extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.