

FBXO31 (P-14): sc-164374

BACKGROUND

FBXO31 (F-box only protein 31) is a 539 amino acid protein that contains one forty amino acid F-box region, making it a member of the F-box family. F-box proteins are critical components of the SCF (Skp1-CUL-1-F-box protein) type E3 ubiquitin ligase complex and are involved in substrate recognition and recruitment for ubiquitination. F-box proteins are members of a large family that regulates cell cycle, immune response, signaling cascades and developmental programs by targeting proteins, such as cyclins, cyclin-dependent kinase inhibitors, I κ B- α and β -catenin, for degradation by the proteasome after ubiquitination. Functioning as a component of the SCF complex, FBXO31 plays a central role in G₁ arrest following DNA damage by promoting the ubiquitination and degradation by the proteasome of phosphorylated cyclin-D1. FBXO31 may also act as a tumor suppressor in human hepatocellular carcinoma (HCC).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FBXO31 (human) mapping to 16q24.2; Fbxo31 (mouse) mapping to 8 E1.

SOURCE

FBXO31 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FBXO31 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-164374 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FBXO31 (P-14) is recommended for detection of FBXO31 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other FBXO family members.

FBXO31 (P-14) is also recommended for detection of FBXO31 in additional species, including equine.

Suitable for use as control antibody for FBXO31 siRNA (h): sc-93123, FBXO31 siRNA (m): sc-145118, FBXO31 shRNA Plasmid (h): sc-93123-SH, FBXO31 shRNA Plasmid (m): sc-145118-SH, FBXO31 shRNA (h) Lentiviral Particles: sc-93123-V and FBXO31 shRNA (m) Lentiviral Particles: sc-145118-V.

Molecular Weight of FBXO38 isoform 1: 61 kDa.

Molecular Weight of FBXO38 isoform 2: 49 kDa.

Positive Controls: Mouse brain extract: sc-2253.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

RESEARCH USE

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

PROTOCOLS

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