SANTA CRUZ BIOTECHNOLOGY, INC.

FBXW9 (K-14): sc-167881

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The Power to Question

BACKGROUND

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. They are members of a larger family of proteins that are involved in the regulation of a wide variety of cellular processes, including the cell cycle, immune responses, signaling cascades and developmental events, through the targeting of proteins, such as cyclins, cyclin-dependent kinase inhibitors, IκB-α and β-catenin, for proteasomal degradation. FBXW9 (F-box and WD repeat domain containing 9), also known as FBW9, is a 488 amino acid protein that contains one F-box domain and 7 WD repeats. Existing as three alternatively spliced isoforms, FBXW9 interacts with CUL-1 and Skp1 p19 and is a component of the SCF type E3 ubiquitin ligase complex.

REFERENCES

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3. Winston, J.T., Koepp, D.M., Zhu, C., Elledge, S.J. and Harper, J.W. 1999. A family of mammalian F-box proteins. Curr. Biol. 9: 1180-1182.
4. Craig, K.L. and Tyers, M. 1999. The F-box: a new motif for ubiquitin dependent proteolysis in cell cycle regulation and signal transduction. Prog. Biophys. Mol. Biol. 72: 299-328.
5. Ilyin, G.P., Rialland, M., Pigeon, C. and Guguen-Guillouzo, C. 2000. cDNA cloning and expression analysis of new members of the mammalian F-box protein family. Genomics 67: 40-47.
6. Schulman, B.A., Carrano, A.C., Jeffrey, P.D., Bowen, Z., Kinnucan, E.R., Finnin, M.S., Elledge, S.J., Harper, J.W., Pagano, M. and Pavletich, N.P. 2000. Insights into SCF ubiquitin ligases from the structure of the Skp1-Skp2 complex. Nature 408: 381-386.
7. Ilyin, G.P., Serandour, A.L., Pigeon, C., Rialland, M., Glaise, D. and Guguen-Guillouzo, C. 2002. A new subfamily of structurally related human F-box proteins. Gene 296: 11-20.

CHROMOSOMAL LOCATION

Genetic locus: FBXW9 (human) mapping to 19p13.2; Fbxw9 (mouse) mapping to 8 C3.

SOURCE

FBXW9 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FBXW9 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167881 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FBXW9 (K-14) is recommended for detection of FBXW9 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 FBXW family members.

FBXW9 (K-14) is also recommended for detection of FBXW9 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for FBXW9 siRNA (h): sc-97380, FBXW9 siRNA (m): sc-145144, FBXW9 shRNA Plasmid (h): sc-97380-SH, FBXW9 shRNA Plasmid (m): sc-145144-SH, FBXW9 shRNA (h) Lentiviral Particles: sc-97380-V and FBXW9 shRNA (m) Lentiviral Particles: sc-145144-V.

Molecular Weight of FBXW9: 54/53/51 kDa.

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.

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.