SANTA CRUZ BIOTECHNOLOGY, INC.

FBXO3 (N-14): sc-167866



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, $I\kappa B-\alpha$ and β -catenin, for proteasomal degradation. FBXO3 (F-box protein 3), also known as FBA or FBX3, is a 471 amino acid member of the F-box protein family. Substrate-recognition component of the SCF (SKP1-CUL1-F-box protein)-type E3 ubiquitin ligase complex, FBXO3 contains an apaG domain and a F-box domain. Existing as two isoforms producted by alternative splicing events, FBX03 interacts with Skp1 p19 and CUL-1.

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. Latres, E., Chiaur, D.S. and Pagano, M. 1999. The human F-box protein β-Trcp associates with the Cul1/Skp1 complex and regulates the stability of β-catenin. Oncogene 18: 849-854.
- 5. Masuda, K., Masuda, R., Neidhart, M., Simmen, B.R., Michel, B.A., Müller-Ladner, U., Gay, R.E. and Gay, S. 2002. Molecular profile of synovial fibroblasts in rheumatoid arthritis depends on the stage of proliferation. Arthritis Res. 4: R8.
- 6. 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: FBXO3 (human) mapping to 11p13; Fbxo3 (mouse) mapping to 2 E2.

SOURCE

FBXO3 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FBX03 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167866 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FBXO3 (N-14) is recommended for detection of FBXO3 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 other FBXO family members.

FBXO3 (N-14) is also recommended for detection of FBXO3 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for FBXO3 siRNA (h): sc-96506, FBXO3 siRNA (m): sc-145116, FBXO3 shRNA Plasmid (h): sc-96506-SH, FBXO3 shRNA Plasmid (m): sc-145116-SH, FBXO3 shRNA (h) Lentiviral Particles: sc-96506-V and FBX03 shRNA (m) Lentiviral Particles: sc-145116-V.

Molecular Weight of FBX03: 55 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.

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.