SANTA CRUZ BIOTECHNOLOGY, INC.

FBXO22 (S-14): sc-164371

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The Power to Question

BACKGROUND

FBXO22 (F-box only protein 22), also known as FBX22 or FBX22p44, is a 403 amino acid protein that is predominately expressed in the liver. 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 response, signaling cascades and developmental processes) through the targeting of proteins, such as cyclins and cyclin-dependent kinase inhibitors (CDKNs), IκB-α and β-catenin, for degradation by the proteasome after ubiquitination. Three isoforms of FBXO22 exist due to alternative splicing.

REFERENCES

1. Winston, J.T., et al. 1999. A family of mammalian F-box proteins. Curr. Biol. 9: 1180-1182.
2. Cenciarelli, C., et al. 1999. Identification of a family of human F-box proteins. Curr. Biol. 9: 1177-1179.
3. Jin, J., et al. 2004. Systematic analysis and nomenclature of mammalian F-box proteins. Genes Dev. 18: 2573-2580.
4. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 609096. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Yoshida, Y. 2007. F-box proteins that contain sugar-binding domains. Biosci. Biotechnol. Biochem. 71: 2623-2631.
6. Cooke, P.S., et al. 2007. The F box protein S phase kinase-associated protein 2 regulates adipose mass and adipocyte number *in vivo.* Obesity 15: 1400-1408.
7. Bernis, C., et al. 2007. Pin1 stabilizes Emi1 during G_2 phase by preventing its association with SCF(βtrcp). EMBO Rep. 8: 91-98.

CHROMOSOMAL LOCATION

Genetic locus: FBXO22 (human) mapping to 15q24.2; Fbxo22 (mouse) mapping to 9 B.

SOURCE

FBXO22 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FBXO22 of human 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-164371 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

FBXO22 (S-14) is recommended for detection of FBXO22 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.

FBXO22 (S-14) is also recommended for detection of FBXO22 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for FBXO22 siRNA (h): sc-90142, FBXO22 siRNA (m): sc-145110, FBXO22 shRNA Plasmid (h): sc-90142-SH, FBXO22 shRNA Plasmid (m): sc-145110-SH, FBXO22 shRNA (h) Lentiviral Particles: sc-90142-V and FBXO22 shRNA (m) Lentiviral Particles: sc-145110-V.

Molecular Weight of FBXO22: 44 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or T1 whole cell lysate.

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.