

FBL18 (G-15): sc-164361

BACKGROUND

FBL18 (F-box and leucine-rich repeat protein 18), also known as FBXL18, is an 805 amino acid protein that contains an F-box near its N-terminus, followed by several leucine-rich repeats and a transmembrane domain at the C-terminus. 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 (CDKs), for degradation by the proteasome after ubiquitination. FBL18 directly interacts with SKP1A p19 and CUL-1, forming a substrate-recognition component of the SCF-type E3 ubiquitin ligase complex. Four isoforms of FBL18 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: 609084. 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 G₂ phase by preventing its association with SCF(βtrcp). *EMBO Rep.* 8: 91-98.

CHROMOSOMAL LOCATION

Genetic locus: FBXL18 (human) mapping to 7p22.1; Fbxl18 (mouse) mapping to 5 G2.

SOURCE

FBL18 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FBL18 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-164361 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FBL18 (G-15) is recommended for detection of FBL18 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 FBL family members.

FBL18 (G-15) is also recommended for detection of FBL18 in additional species, including equine and canine.

Suitable for use as control antibody for FBL18 siRNA (h): sc-89395, FBL18 siRNA (m): sc-145092, FBL18 shRNA Plasmid (h): sc-89395-SH, FBL18 shRNA Plasmid (m): sc-145092-SH, FBL18 shRNA (h) Lentiviral Particles: sc-89395-V and FBL18 shRNA (m) Lentiviral Particles: sc-145092-V.

Molecular Weight of FBL18: 88 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

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.


 MONOS
 Satisfaction
 Guaranteed

Try **FBL18 (LL-3): sc-100738**, our highly recommended monoclonal alternative to FBL18 (G-15).