

## FBL6 (E-16): sc-54500

### BACKGROUND

FBL6 is a 539 amino acid protein encoded by the human gene FBXL6. FBL6 contains one 40 amino acid F-box region, making it a member of the F-box family. FBL6 also contains three LRR (leucine-rich) repeats. 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 $\kappa$ B- $\alpha$  and  $\beta$ -catenin, for degradation by the proteasome after ubiquitination. Localized near the nucleus in the cytoplasm, FBL6 is ubiquitously expressed and believed to directly interact with Skp1 p19 and CUL-1.

### REFERENCES

1. Winston, J.T., Strack, P., Beer-Romero, P., Chu, C.Y., Elledge, S.J. and Harper, J.W. 1999. The SCF  $\beta$ -TrCP-ubiquitin ligase complex associates specifically with phosphorylated destruction motifs in I $\kappa$ B- $\alpha$  and  $\beta$ -catenin and stimulates I $\kappa$ B- $\alpha$  ubiquitination *in vitro*. *Genes Dev.* 13: 270-283.
2. Cenciarelli, C., Chiaur, D.S., Guardavaccaro, D., Parks, W., Vidal, M. and Pagano, M. 1999. Identification of a family of human F-box proteins. *Curr. Biol.* 9: 1177-1179.
3. Winston, J.T., Koepf, 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.

### CHROMOSOMAL LOCATION

Genetic locus: FBXL6 (human) mapping to 8q24.3; Fbxl6 (mouse) mapping to 15 D3.

### SOURCE

FBL6 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FBL6 of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-54500 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

FBL6 (E-16) is recommended for detection of FBL6 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).

FBL6 (E-16) is also recommended for detection of FBL6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FBL6 siRNA (h): sc-62304, FBL6 siRNA (m): sc-62305, FBL6 shRNA Plasmid (h): sc-62304-SH, FBL6 shRNA Plasmid (m): sc-62305-SH, FBL6 shRNA (h) Lentiviral Particles: sc-62304-V and FBL6 shRNA (m) Lentiviral Particles: sc-62305-V.

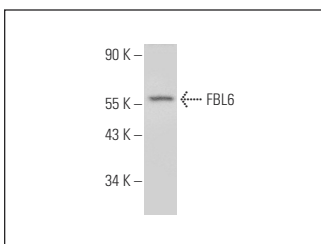
Molecular Weight of FBL6: 59 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

### 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.

### DATA



FBL6 (E-16): sc-54500. Western blot analysis of FBL6 expression in HeLa whole cell lysate.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.