

FBL12 (L-14): sc-167854

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, $\text{I}\kappa\text{B-}\alpha$ and β -catenin, for proteasomal degradation. FBL12 (F-box and leucine-rich repeat protein 12), also designated FBXL12, is a 326 amino acid protein that contains one F-box domain, five LRR (leucine-rich) repeats and exists as two alternatively spliced isoforms. FBL12 interacts with both Skp1 and CUL-1, and is encoded by a gene that maps to human chromosome 19p13.2.

REFERENCES

- Bai, C., Sen, P., Hofmann, K., Ma, L., Goebel, M., Harper, J.W. and Elledge, S.J. 1996. SKP1 connects cell cycle regulators to the ubiquitin proteolysis machinery through a novel motif, the F-box. *Cell* 86: 263-274.
- Skowyra, D., Craig, K.L., Tyers, M., Elledge, S.J. and Harper, J.W. 1997. F-box proteins are receptors that recruit phosphorylated substrates to the SCF ubiquitin-ligase complex. *Cell* 91: 209-219.
- 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.
- 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.
- Kipreos, E.T. and Pagano, M. 2000. The F-box protein family. *Genome Biol.* 1: 3002.
- Jin, J., Cardozo, T., Lovering, R.C., Elledge, S.J., Pagano, M. and Harper, J.W. 2004. Systematic analysis and nomenclature of mammalian F-box proteins. *Genes Dev.* 18: 2573-2580.
- Online Mendelian Inheritance in Man, OMIM[™]. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 609079; World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: FBXL12 (human) mapping to 19p13.2; Fbxl12 (mouse) mapping to 9 A3.

SOURCE

FBL12 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FBL12 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-167854 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FBL12 (L-14) is recommended for detection of FBL12 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.

Suitable for use as control antibody for FBL12 siRNA (h): sc-97389, FBL12 siRNA (m): sc-145086, FBL12 shRNA Plasmid (h): sc-97389-SH, FBL12 shRNA Plasmid (m): sc-145086-SH, FBL12 shRNA (h) Lentiviral Particles: sc-97389-V and FBL12 shRNA (m) Lentiviral Particles: sc-145086-V.

Molecular Weight of FBL12: 37 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.