

FBL4 (m): 293T Lysate: sc-125329

BACKGROUND

FBL4 is a 621 amino acid protein encoded by the human gene FBXL4. FBL4 contains one 40 amino acid F-box region making it a member of the F-box family. FBL4 also contains eight 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, signalling cascades and developmental programs by targeting proteins, such as cyclins, cyclin-dependent kinase inhibitors, $\text{I}\kappa\text{B}\alpha$ and β -catenin, for degradation by the proteasome after ubiquitination. Localized near the nucleus in the cytoplasm, FBL4 is expressed in heart, kidney, liver, lung, pancreas and placenta, however, it is not found in skeletal muscle.

REFERENCES

1. Winston, J.T., Strack, P., Beer-Romero, P., Chu, C.Y., Elledge, S.J. and Harper, J.W. 1999. The SCF β -Trcp-ubiquitin ligase complex associates specifically with phosphorylated destruction motifs in $\text{I}\kappa\text{B}\alpha$ and β -catenin and stimulates $\text{I}\kappa\text{B}\alpha$ 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.
7. 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: *Fbxl4* (mouse) mapping to 4 A3.

PRODUCT

FBL4 (m): 293T Lysate represents a lysate of mouse FBL4 transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

STORAGE

Store at -20°C . Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

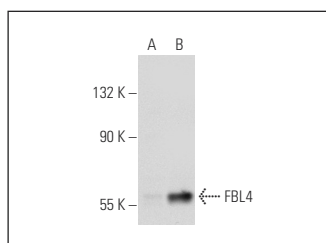
APPLICATIONS

FBL4 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive FBL4 antibodies. Recommended use: 10-20 μl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FBL4 (2352C1a): sc-81270 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse FBL4 expression in FBL4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



FBL4 (2352C1a): sc-81270. Western blot analysis of FBL4 expression in non-transfected: sc-117752 (A) and mouse FBL4 transfected: sc-125329 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.