

FBL4 (2352C1a): sc-81270

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, I κ B- α 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 SCFb-TRCP-ubiquitin ligase complex associates specifically with phosphorylated destruction motifs in I κ B α and β -catenin and stimulates I κ B α ubiquitination *in vitro*. *Genes Dev.* 13: 270-283.
2. 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.
3. 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.
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: FBXL4 (human) mapping to 6q16.1.

SOURCE

FBL4 (2352C1a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the N-terminus of FBL4 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

PROTOCOLS

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

APPLICATIONS

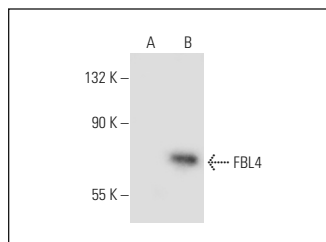
FBL4 (2352C1a) is recommended for detection of FBL4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for FBL4 siRNA (h): sc-62300, FBL4 shRNA Plasmid (h): sc-62300-SH and FBL4 shRNA (h) Lentiviral Particles: sc-62300-V.

Molecular Weight of FBL4: 70 kDa.

Positive Controls: FBL4 (h2): 293T Lysate: sc-116462 or Hep G2 cell lysate: sc-2227.

DATA



FBL4 (2352C1a): sc-81270. Western blot analysis of FBL4 expression in non-transfected: sc-117752 (A) and human FBL4 transfected: sc-116462 (B) 293T whole cell lysates.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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