

FBXO8 (C-3): sc-373854

BACKGROUND

F-box only protein 8 (FBXO8) is a 319 amino acid protein encoded by the human gene FBXO8. FBXO8 contains one 40 amino acid F-box region, making it a member of the F-box family. FBXO8 also contains one SEC7 domain, a domain that catalyzes exchange of GDP for GTP on the ARF family of small GTP-binding proteins. 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, FBXO8 is ubiquitously expressed and believed to promote the activation of ARF through replacement of GDP with GTP.

REFERENCES

1. Winston, J.T., et al. 1999. The SCF β -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. Cenciarelli, C., et al. 1999. Identification of a family of human F-box proteins. *Curr. Biol.* 9: 1177-1179.
3. Winston, J.T., et al. 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., et al. 2000. cDNA cloning and expression analysis of new members of the mammalian F-box protein family. *Genomics* 67: 40-47.
6. Schulman, B.A., et al. 2000. Insights into SCF ubiquitin ligases from the structure of the Skp1-Skp2 complex. *Nature* 408: 381-386.
7. Ilyin, G.P., et al. 2002. A new subfamily of structurally related human F-box proteins. *Gene* 296: 11-20.

CHROMOSOMAL LOCATION

Genetic locus: FBXO8 (human) mapping to 4q34.1; Fbxo8 (mouse) mapping to 8 B2.

SOURCE

FBXO8 (C-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 55-91 within an internal region of FBXO8 of human origin.

PRODUCT

Each vial contains 200 μ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-373854 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

FBXO8 (C-3) is recommended for detection of FBXO8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

FBXO8 (C-3) is also recommended for detection of FBXO8 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FBXO8 siRNA (h): sc-62308, FBXO8 siRNA (m): sc-62309, FBXO8 shRNA Plasmid (h): sc-62308-SH, FBXO8 shRNA Plasmid (m): sc-62309-SH, FBXO8 shRNA (h) Lentiviral Particles: sc-62308-V and FBXO8 shRNA (m) Lentiviral Particles: sc-62309-V.

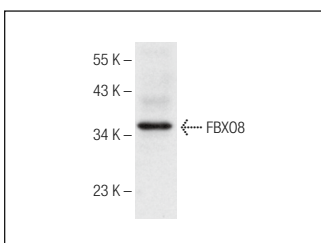
Molecular Weight of FBXO8: 37 kDa.

Positive Controls: human heart extract: sc-363763.

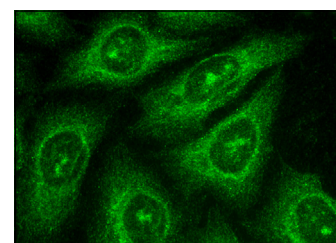
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



FBXO8 (C-3): sc-373854. Western blot analysis of FBXO8 expression in human heart tissue extract.



FBXO8 (C-3): sc-373854. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

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 for detailed protocols and support products.