# FBL7 (T-15): sc-54369



The Power to Question

#### **BACKGROUND**

FBL7 is a 491 amino acid protein encoded by the human gene FBXL7. FBL7 contains one 40 amino acid F-box region, making it a member of the F-box family. FBL7 also contains ten 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, lkB- $\alpha$  and  $\beta$ -catenin, for degradation by the proteasome after ubiquitination. Localized near the nucleus in the cytoplasm, FBL7 is ubiquitously expressed and believed to recognize and bind to phosphorylated proteins to promote their ubiquitination and degradation.

# **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 lkB- $\alpha$  and  $\beta$ -catenin and stimulates lkB- $\alpha$  ubiquitination *in vitro*. Genes Dev. 13: 270-283.
- 2. 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.
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# **CHROMOSOMAL LOCATION**

Genetic locus: FBXL7 (human) mapping to 5p15.1; Fbxl7 (mouse) mapping to 15 B1.

# SOURCE

FBL7 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FBL7 of human origin.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **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-54369 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

FBL7 (T-15) is recommended for detection of FBL7 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).

FBL7 (T-15) is also recommended for detection of FBL7 in additional species, including canine and avian.

Suitable for use as control antibody for FBL7 siRNA (h): sc-62306, FBL7 siRNA (m): sc-62307, FBL7 shRNA Plasmid (h): sc-62306-SH, FBL7 shRNA Plasmid (m): sc-62307-SH, FBL7 shRNA (h) Lentiviral Particles: sc-62306-V and FBL7 shRNA (m) Lentiviral Particles: sc-62307-V.

Molecular Weight of FBL7: 55 kDa.

Positive Controls: mouse heart extract: sc-2254.

# **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) with UltraCruz™ Mounting Medium: sc-24941.

# **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.



Try **FBL7 (A-8): sc-374319**, our highly recommended monoclonal alternative to FBL7 (T-15).

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