## SANTA CRUZ BIOTECHNOLOGY, INC.

# FBL20 (D-12): sc-242799



#### BACKGROUND

FBL20 (F-box/LRR-repeat protein 20) is a 436 amino acid protein encoded by the human gene FBXL20. FBL20 contains one 40 amino acid F-box region, making it a member of the F-box family. FBL20 also contains 12 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, signaling cascades and developmental programs by targeting proteins, such as cyclins, cyclin-dependent kinase inhibitors,  $l\kappa B-\alpha$  and  $\beta$ -catenin, for degradation by the proteasome after ubiquitination. FBL20 exists as two isoforms as a result of alternative splicing events.

#### 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 IkB- $\alpha$  and  $\beta$ -catenin and stimulates IkB- $\alpha$  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.
- 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.
- 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.

### CHROMOSOMAL LOCATION

Genetic locus: FBXL20 (human) mapping to 17q12; Fbxl20 (mouse) mapping to 11 D.

### SOURCE

FBL20 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FBL20 of human origin.

#### 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-242799 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

FBL20 (D-12) is recommended for detection of FBL20 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

FBL20 (D-12) is also recommended for detection of FBL20 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FBL20 siRNA (h): sc-94158, FBL20 siRNA (m): sc-145093, FBL20 shRNA Plasmid (h): sc-94158-SH, FBL20 shRNA Plasmid (m): sc-145093-SH, FBL20 shRNA (h) Lentiviral Particles: sc-94158-V and FBL20 shRNA (m) Lentiviral Particles: sc-145093-V.

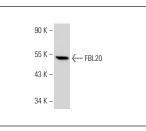
Molecular Weight of FBL20 isoforms: 48/45 kDa.

Positive Controls: human colon extract: sc-363757.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

#### DATA



FBL20 (D-12): sc-242799. Western blot analysis of FBL20 expression in human colon tissue extract.

#### **RESEARCH USE**

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

