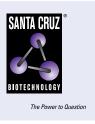
# SANTA CRUZ BIOTECHNOLOGY, INC.

# FBXO18 (2353C1a): sc-81563



### BACKGROUND

FBX018 (F-box only protein 18, F-box DNA helicase 1) is a 1,043 amino acid protein encoded by the human gene FBX018. FBX018 belongs to the helicase family (UvrD subfamily) and contains one F-box domain. This nuclear protein is a DNA-dependent ATPase that unwinds double-stranded DNA in a 3' to 5' direction. FBX018 also recognizes and binds to a variety of phosphorylated proteins and promotes their ubiquitination and degradation. It also interacts with Skp1 in the SCF E3 ubiquitin ligase complex consisting of Skp1, CUL-1, Rbx1 and FBX018.

# REFERENCES

- Heller, R.C. and Marians, K.J. 2007. Non-replicative helicases at the replication fork. DNA Repair 6: 945-952.
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- 3. Wang, Y., et al. 2007. Proteomic analysis of augmented immune responses in mouse by prime-and-boost immunization strategy with DNA vaccine coding HBsAg and rHBsAg protein. Vaccine 25: 8146-8153.
- Fujarewicz, K., et al. 2007. A multi-gene approach to differentiate papillary thyroid carcinoma from benign lesions: gene selection using support vector machines with bootstrapping. Endocr. Relat. Cancer 14: 809-826.

#### **CHROMOSOMAL LOCATION**

Genetic locus: FBX018 (human) mapping to 10p15.1.

# SOURCE

FBX018 (2353C1a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the N-terminus of FBX018 of human origin.

#### PRODUCT

Each vial contains 100  $\mu g$   $lgG_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

#### **APPLICATIONS**

FBX018 (2353C1a) is recommended for detection of FBX018 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for FBX018 siRNA (h): sc-90469, FBX018 shRNA Plasmid (h): sc-90469-SH and FBX018 shRNA (h) Lentiviral Particles: sc-90469-V.

Molecular Weight of FBX018: 118 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

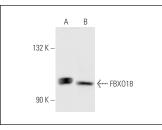
# **STORAGE**

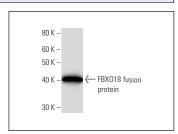
Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

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

#### DATA





FBX018 (2353C1a): sc-81563. Western blot analysis of FBX018 expression in 293T ( $\bf{A}$ ) and HeLa ( $\bf{B}$ ) whole cell lysates.

# FBX018 (2353C1a): sc-81563. Western blot analysis of human recombinant FBX018 fusion protein.

# **SELECT PRODUCT CITATIONS**

- 1. Bacquin, A., et al. 2013. The helicase FBH1 is tightly regulated by PCNA via CRL4<sup>Cdt2</sup>-mediated proteolysis in human cells. Nucleic Acids Res. 41: 6501-6513.
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- Zarrizi, R., et al. 2020. Germline RBBP8 variants associated with earlyonset breast cancer compromise replication fork stability. J. Clin. Invest. 130: 4069-4080.
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- Zhang, H., et al. 2023. Cullin-associated and neddylation-dissociated 1 regulate reprogramming of lipid metabolism through SKP1-Cullin-1-Fbox<sup>FBX011</sup>-mediated heterogeneous nuclear ribonucleoprotein A2/B1 ubiquitination and promote hepatocellular carcinoma. Clin. Transl. Med. 13: e1443.
- Dixit, S., et al. 2024. RTEL1 helicase counteracts RAD51-mediated homologous recombination and fork reversal to safeguard replicating genomes. Cell Rep. 43: 114594.
- 9. Uhrig, M.E., et al. 2024. Disparate requirements for RAD54L in replication fork reversal. Nucleic Acids Res. 52: 12390-12404.

# **PROTOCOLS**

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