

# FBL8 (D-1): sc-390582

## BACKGROUND

FBL8 (F-box/LRR-repeat protein 8) is a 374 amino acid protein encoded by the human gene FBXL8. FBL8 contains one 50 amino acid F-box region, making it a member of the F-box family. 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, IκB-α and β-catenin, for degradation by the proteasome after ubiquitination.

## CHROMOSOMAL LOCATION

Genetic locus: FBXL8 (human) mapping to 16q22.1; Fbxl8 (mouse) mapping to 8 D3.

## SOURCE

FBL8 (D-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 274-298 of FBL8 of human origin.

## PRODUCT

Each vial contains 200 μg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FBL8 (D-1) is available conjugated to agarose (sc-390582 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390582 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390582 PE), fluorescein (sc-390582 FITC), Alexa Fluor® 488 (sc-390582 AF488), Alexa Fluor® 546 (sc-390582 AF546), Alexa Fluor® 594 (sc-390582 AF594) or Alexa Fluor® 647 (sc-390582 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390582 AF680) or Alexa Fluor® 790 (sc-390582 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390582 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

FBL8 (D-1) is recommended for detection of FBL8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg 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).

Suitable for use as control antibody for FBL8 siRNA (h): sc-93248, FBL8 siRNA (m): sc-145094, FBL8 shRNA Plasmid (h): sc-93248-SH, FBL8 shRNA Plasmid (m): sc-145094-SH, FBL8 shRNA (h) Lentiviral Particles: sc-93248-V and FBL8 shRNA (m) Lentiviral Particles: sc-145094-V.

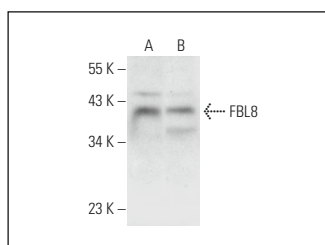
Molecular Weight of FBL8: 41 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or Hs 181 Tes whole cell lysate: sc-364779.

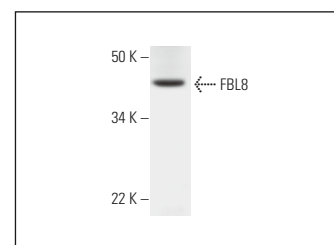
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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 A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



FBL8 (D-1): sc-390582. Western blot analysis of FBL8 expression in K-562 (A) and Hs 181 Tes (B) whole cell lysates.



FBL8 (D-1): sc-390582. Western blot analysis of FBL8 expression in Jurkat whole cell lysate.

## SELECT PRODUCT CITATIONS

- Chang, S.C., et al. 2020. Human FBXL8 is a novel E3 ligase which promotes BRCA metastasis by stimulating pro-tumorigenic cytokines and inhibiting tumor suppressors. *Cancers* 12: 2210.
- Bajpai, S., et al. 2022. Ubiquitylation of unphosphorylated c-Myc by novel E3 ligase SCF<sup>Fbxl8</sup>. *Cancer Biol. Ther.* 23: 348-357.
- Yao, J., et al. 2023. SCF<sup>Fbxl8</sup> contributes to liver metastasis and stem-cell-like features in colorectal cancer cells by mediating ubiquitination and degradation of TP53. *Clin. Transl. Med.* 13: e1208.

## 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](http://www.scbt.com) for detailed protocols and support products.