FBXO28 (C-8): sc-376851



The Power to Question

BACKGROUND

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. They are members of a larger family of proteins that are involved in the regulation of a wide variety of cellular processes (including the cell cycle, immune responses, signaling cascades and developmental events) through the targeting of proteins, such as cyclins, cyclin-dependent kinase inhibitors, $l_{\rm K}B$ - α and β -catenin, for proteasomal degradation. FBXO28 (F-box protein 28), also known as fbx28, is a 368 amino acid protein that contains one F-box domain and belongs to the F-box protein family. The gene encoding FBXO28 maps to human chromosome 1q42.11, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

- Eudy, J.D., et al. 1998. Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome type IIa. Science 280: 1753-1757.
- 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.
- 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.
- Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.

CHROMOSOMAL LOCATION

Genetic locus: FBX028 (human) mapping to 1q42.11; Fbxo28 (mouse) mapping to 1 H5.

SOURCE

FBX028 (C-8) is a mouse monoclonal antibody raised against amino acids 69-368 mapping at the C-terminus of FBX028 of human origin.

PRODUCT

Each vial contains 200 μg lgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FBX028 (C-8) is available conjugated to agarose (sc-376851 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376851 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376851 PE), fluorescein (sc-376851 FITC), Alexa Fluor 488 (sc-376851 AF488), Alexa Fluor 546 (sc-376851 AF546), Alexa Fluor 594 (sc-376851 AF594) or Alexa Fluor 647 (sc-376851 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor 680 (sc-376851 AF680) or Alexa Fluor 790 (sc-376851 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FBX028 (C-8) is recommended for detection of FBX028 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

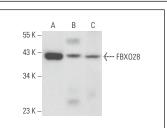
FBX028 (C-8) is also recommended for detection of FBX028 in additional species, including equine, canine, bovine and porcine.

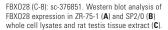
Suitable for use as control antibody for FBXO28 siRNA (h): sc-88135, FBXO28 siRNA (m): sc-145114, FBXO28 shRNA Plasmid (h): sc-88135-SH, FBXO28 shRNA Plasmid (m): sc-145114-SH, FBXO28 shRNA (h) Lentiviral Particles: sc-88135-V and FBXO28 shRNA (m) Lentiviral Particles: sc-145114-V.

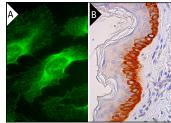
Molecular Weight of FBX028: 41 kDa.

Positive Controls: rat testis extract: sc-2400, SP2/0 whole cell lysate: sc-364795 or ZR-75-1 cell lysate: sc-2241.

DATA







FBX028 (C-8): sc-376851. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of basal cells (B).

SELECT PRODUCT CITATIONS

1. Yu, T., et al. 2019. Sublytic C5b-9 induces proliferation of glomerular mesangial cells via ERK5/MZF1/RGC-32 axis activated by FBX028-TRAF6 complex. J. Cell. Mol. Med. 23: 5654-5671.

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.