

FBXO11 (E-9): sc-393229

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, I κ B- α and β -catenin, for proteasomal degradation. FBXO11 (F-box only protein 11), also known as VIT1 (vitiligo-associated protein 1), is a 927 amino acid nuclear protein that contains one UBR-type zinc finger, one F-box domain and 19 PbH1 repeats. Involved in protein ubiquitination, FBXO11 functions as a substrate recognition component of the SCF complex and is thought to bind to and inhibit the transcriptional activity of p53. Reduced expression of FBXO11 is associated with vitiligo, a disease characterized by progressive skin depigmentation. Multiple isoforms of FBXO11 exist due to alternative splicing events.

REFERENCES

- Cenciarelli, C., et al. 1999. Identification of a family of human F-box proteins. *Curr. Biol.* 9: 1177-1179.
- Winston, J.T., et al. 1999. A family of mammalian F-box proteins. *Curr. Biol.* 9: 1180-1182.
- Le Poole, I.C., et al. 2001. "VIT1", a novel gene associated with vitiligo. *Pigment Cell Res.* 14: 475-484.
- Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607871. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: FBXO11 (human) mapping to 2p16.3; Fbxo11 (mouse) mapping to 17 E4.

SOURCE

FBXO11 (E-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 90-109 near the N-terminus of FBXO11 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FBXO11 (E-9) is available conjugated to agarose (sc-393229 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393229 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393229 PE), fluorescein (sc-393229 FITC), Alexa Fluor[®] 488 (sc-393229 AF488), Alexa Fluor[®] 546 (sc-393229 AF546), Alexa Fluor[®] 594 (sc-393229 AF594) or Alexa Fluor[®] 647 (sc-393229 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393229 AF680) or Alexa Fluor[®] 790 (sc-393229 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393229 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

FBXO11 (E-9) is recommended for detection of FBXO11 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

FBXO11 (E-9) is also recommended for detection of FBXO11 in additional species, including equine, canine, bovine, porcine and avian.

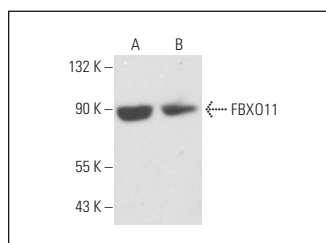
Suitable for use as control antibody for FBXO11 siRNA (h): sc-94892, FBXO11 siRNA (m): sc-145102, FBXO11 shRNA Plasmid (h): sc-94892-SH, FBXO11 shRNA Plasmid (m): sc-145102-SH, FBXO11 shRNA (h) Lentiviral Particles: sc-94892-V and FBXO11 shRNA (m) Lentiviral Particles: sc-145102-V.

Molecular Weight of FBXO11: 103 kDa.

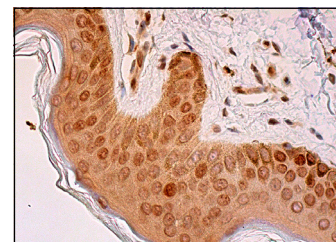
Molecular Weight of FBXO11 fragment: 14 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270 or F9 cell lysate: sc-2245.

DATA



FBXO11 (E-9): sc-393229. Western blot analysis of FBXO11 expression in F9 (A) and HEL 92.1.7 (B) whole cell lysates.



FBXO11 (E-9): sc-393229. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing nuclear and cytoplasmic staining of keratinocytes, fibroblasts, Langerhans cells and melanocytes.

SELECT PRODUCT CITATIONS

- Xia, H., et al. 2022. Insulin action and resistance are dependent on a GSK3 β -FBXW7-ERR α transcriptional axis. *Nat. Commun.* 13: 2105.

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.

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