# FBXO11 (N-16): sc-167859



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,  $l\kappa B-\alpha$  and  $\beta$ -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.
- 2. 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.
- 4. 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/
- 5. Jin, J., et al. 2004. Systematic analysis and nomenclature of mammalian F-box proteins. Genes Dev. 18: 2573-2580.
- Segade, F., et al. 2006. Association of the FBX011 gene with chronic otitis media with effusion and recurrent otitis media: the Minnesota COME/ROM Family Study. Arch. Otolaryngol. Head Neck Surg. 132: 729-733.
- 7. Cook, J.R., et al. 2006. FBX011/PRMT9, a new protein arginine methyltransferase, symmetrically dimethylates arginine residues. Biochem. Biophys. Res. Commun. 342: 472-481.
- Abida, W.M., et al. 2007. FBX011 promotes the Neddylation of p53 and inhibits its transcriptional activity. J. Biol. Chem. 282: 1797-1804.

# **CHROMOSOMAL LOCATION**

Genetic locus: FBX011 (human) mapping to 2p16.3; Fbxo11 (mouse) mapping to 17 E4.

# SOURCE

FBX011 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of FBX011 of human origin.

#### **STORAGE**

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

#### **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-167859 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

FBX011 (N-16) is recommended for detection of FBX011 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); non cross-reactive with other FBX0 family members.

FBX011 (N-16) is also recommended for detection of FBX011 in additional species, including canine, bovine and avian.

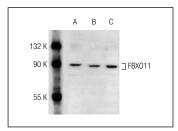
Suitable for use as control antibody for FBX011 siRNA (h): sc-94892, FBX011 siRNA (m): sc-145102, FBX011 shRNA Plasmid (h): sc-94892-SH, FBX011 shRNA Plasmid (m): sc-145102-SH, FBX011 shRNA (h) Lentiviral Particles: sc-94892-V and FBX011 shRNA (m) Lentiviral Particles: sc-145102-V.

Molecular Weight of FBX011: 103 kDa.

Molecular Weight of FBX011 fragment: 14 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138, C32 nuclear extract: sc-2136 or SK-MEL-28 nuclear extract.

## **DATA**



FBXO11 (N-16): sc-167859. Western blot analysis of FBXO11 expression in NIH/3T3 (**A**), C32 (**B**) and SK-MEL-28 (**C**) nuclear extracts.

# **RESEARCH USE**

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



Try **FBX011 (E-9):** sc-393229 or **FBX011 (LA-58):** sc-130473, our highly recommended monoclonal alternatives to FBX011 (N-16).

**Santa Cruz Biotechnology, Inc.** 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**