

### FBXO11 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16914a

#### Specification

### FBXO11 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q86XK2</u> <u>NP\_001177203.1</u> Human Rabbit Polyclonal Rabbit IgG 103585 55-83

#### FBXO11 Antibody (N-term) - Additional Information

Gene ID 80204

**Other Names** 

F-box only protein 11, Protein arginine N-methyltransferase 9, Vitiligo-associated protein 1, VIT-1, FBXO11, FBX11, PRMT9, VIT1

Target/Specificity

This FBXO11 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-83 amino acids from the N-terminal region of human FBXO11.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

FBXO11 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## FBXO11 Antibody (N-term) - Protein Information

Name FBX011 {ECO:0000303|PubMed:25827072, ECO:0000312|HGNC:HGNC:13590}



Function Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins, such as DTL/CDT2, BCL6, SNAI1 and PRDM1/BLIMP1 (PubMed: 17098746, PubMed: 22113614, PubMed: 23478441, PubMed: 23478445, PubMed:23892434, PubMed:24613396, PubMed:24968003, PubMed:25827072, PubMed: 29059170). The SCF(FBXO11) complex mediates ubiquitination and degradation of BCL6, thereby playing a role in the germinal center B- cells terminal differentiation toward memory B-cells and plasma cells (PubMed:22113614). The SCF(FBXO11) complex also mediates ubiquitination and degradation of DTL, an important step for the regulation of TGF- beta signaling, cell migration and the timing of the cell-cycle progression and exit (PubMed:23478441, PubMed:23478445). The SCF(FBXO11) complex also catalyzes ubiquitination and degradation of GSK3B-phosphorylated SNAI1 (PubMed:25827072, PubMed:29059170). Binds to and neddylates phosphorylated p53/TP53, inhibiting its transcriptional activity (PubMed:<u>17098746</u>). Plays a role in the regulatiom of erythropoiesis but not myelopoiesis or megakaryopoiesis (PubMed:<u>33156908</u>). Mechanistically, activates erythroid genes by mediating the degradation of BAHD1, a heterochromatin-associated protein that recruits corepressors to H3K27me3 marks (PubMed:<u>33156908</u>). Participates in macrophage cell death and inflammation in response to bacterial toxins by regulating the expression of complement 5a receptor 1/C5AR1 and IL-1beta (PubMed:<u>33156908</u>). Acts as a critical regulator to determine the level of MHC-II by mediating the recognition of degron at the P/S/T domain of CIITA leading to its ubiquitination and subsequent degradation via the proteasome (PubMed:<u>37279268</u>). Participates in the antiviral repsonse by initiating the activation of TBK1-IRF3-IFN-I axis (PubMed:<u>36897010</u>). Mediates the 'Lys-63'-linked ubiguitination of TRAF3 to strengthen the interaction between TRAF3 and TBK1 (PubMed:<u>36897010</u>).

Cellular Location Nucleus. Chromosome

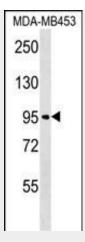
**Tissue Location** Isoform 5 is expressed in keratinocytes, fibroblasts and melanocytes.

## FBX011 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### FBXO11 Antibody (N-term) - Images



FBXO11 Antibody (N-term) (Cat. #AP16914a) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the FBXO11 antibody detected the FBXO11 protein (arrow).

# FBXO11 Antibody (N-term) - Background

This gene encodes a member of the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of ubiguitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene belongs to the Fbxs class. It can function as an arginine methyltransferase that symmetrically dimethylates arginine residues, and it acts as an adaptor protein to mediate the neddylation of p53, which leads to the suppression of p53 function. This gene is known to be down-regulated in melanocytes from patients with vitiligo, a skin disorder that results in depigmentation. Polymorphisms in this gene are associated with chronic otitis media with effusion and recurrent otitis media (COME/ROM), a hearing loss disorder, and the knockout of the homologous mouse gene results in the deaf mouse mutant leff (lf), a single gene model of otitis media. Alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene.

# FBXO11 Antibody (N-term) - References

Guan, C., et al. Int. J. Mol. Med. 26(1):57-65(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Guan, C.P., et al. Zhonghua Yi Xue Za Zhi 90(16):1126-1130(2010) Abida, W.M., et al. J. Biol. Chem. 282(3):1797-1804(2007) Segade, F., et al. Arch. Otolaryngol. Head Neck Surg. 132(7):729-733(2006)