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FBXO11 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5592

Product Information

Application	WB
Primary Accession	Q86XK2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	103585
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	80204
Antigen Region	55-83
Other Names	F-box only protein 11, Protein arginine N-methyltransferase 9, Vitiligo-associated protein 1, VIT-1, FBXO11, FBX11, PRMT9, VIT1
Dilution	WB~~1:1000
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.
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.

Protein Information

Name	FBXO11 {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:17098746). Plays a role in the regulatiom of erythropoiesis but not myelopoiesis or megakaryopoiesis (PubMed:33156908). Mechanistically, activates erythroid genes by mediating the degradation of BAHD1, a heterochromatin-associated protein that recruits corepressors to H3K27me3 marks (PubMed:33156908). 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:33156908). 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:37279268). Participates in the antiviral repsonse by initiating the activation of TBK1-IRF3-IFN-I axis (PubMed:36897010). Mediates the 'Lys-63'-linked ubiquitination of TRAF3 to strengthen the interaction between TRAF3 and TBK1 (PubMed:36897010).
Cellular Location	Nucleus. Chromosome
Tissue Location	Isoform 5 is expressed in keratinocytes, fibroblasts and melanocytes.

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 ubiquitin 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 Jeff (Jf), a single gene model of otitis media. Alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene.

References

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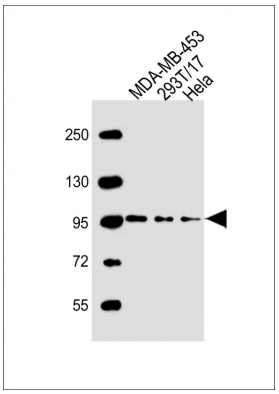
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Guan, C.P., et al. Zhonghua Yi Xue Za Zhi 90(16):1126-1130(2010)
Abida, W.M., et al. J. Biol. Chem. 282(3):1797-1804(2007)
Segade, F., et al. Arch. Otolaryngol. Head Neck Surg. 132(7):729-733(2006)

Images



All lanes : Anti-FBXO11 Antibody (N-term) at 1:1000 dilution Lane 1: MDA-MB-453 whole cell lysate Lane 2: 293T/17 whole cell lysate Lane 3: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 104 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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