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FBXO11 Rabbit pAb

Catalog # AP98622

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q86XK2
Other Accession	Q86XK2
Predicted	Rat, Pig, Human, Mouse, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	103585
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FBXO11
Epitope Specificity	65-160/927
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 F-box domain. Contains 19 PbH1 repeats. Contains 1 UBR-type zinc finger.
SUBUNIT	Component of the probable SCF(FBXWO11) complex consisting of CUL1, RBX1, SKP1 and FBXO11. Interacts with TP53.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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˚B-□and ∫-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.

Additional Information

Gene ID	80204
Other Names	FBX11; IDDFBA; PRMT9; UBR6; UG063H01; VIT1; Jf; FBX11_HUMAN; FBXO11; Protein arginine N-methyltransferase 9; Vitiligo-associated protein 1 (VIT-1); FBX11_MOUSE; FBX11_RAT; F-box protein 11; F-box only protein 11; ubiquitin

	protein ligase E3 component n-recognin 6
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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