

FBXO11 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP16914a

Specification

FBXO11 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

Q86XK2

FBX011 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 80204

Other Names

F-box only protein 11, Protein arginine N-methyltransferase 9, Vitiligo-associated protein 1, VIT-1, FBX011, FBX11, PRMT9, VIT1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FBXO11 Antibody (N-term) Blocking Peptide - Protein Information

Name FBXO11

Synonyms FBX11, PRMT9, VIT1

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 and PRDM1/BLIMP1. 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. 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. Binds to and neddylates phosphorylated p53/TP53, inhibiting its transcriptional activity. Plays a role in the regulatiom of erythropoiesis but not myelopoiesis or megakaryopoiesis. 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



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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. 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.

FBXO11 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

FBX011 Antibody (N-term) Blocking Peptide - Images

FBXO11 Antibody (N-term) Blocking Peptide - Background

This gene encodes a member of the F-box protein familywhich is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits ofubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. TheF-box proteins are divided into 3 classes: Fbws containing WD-40domains, Fbls containing leucine-rich repeats, and Fbxs containingeither different protein-protein interaction modules or norecognizable motifs. The protein encoded by this gene belongs to the Fbxs class. It can function as an arginine methyltransferasethat 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 bedown-regulated in melanocytes from patients with vitiligo, a skindisorder that results in depigmentation. Polymorphisms in this geneare associated with chronic otitis media with effusion andrecurrent otitis media (COME/ROM), a hearing loss disorder, and theknockout of the homologous mouse gene results in the deaf mousemutant Jeff (Jf), a single gene model of otitis media. Alternatively spliced transcript variants encoding distinctisoforms have been identified for this gene.

FBX011 Antibody (N-term) Blocking Peptide - 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)