

FBX09 / FBX09 Antibody (aa431-447) Rabbit Polyclonal Antibody Catalog # ALS11326

#### **Specification**

## FBX09 / FBXO9 Antibody (aa431-447) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, IF, E <u>O9UK97</u> Human Rabbit Polyclonal 52kDa KDa WB~~1:1000 IHC-P~~N/A IF~~1:50~200 E~~N/A

#### FBX09 / FBX09 Antibody (aa431-447) - Additional Information

Gene ID 26268

**Other Names** F-box only protein 9, Cross-immune reaction antigen 1, Renal carcinoma antigen NY-REN-57, FBXO9, FBX9, VCIA1

**Target/Specificity** Amino acids 431-447 of human FBOX9 protein.

**Reconstitution & Storage** +4°C or -20°C, Avoid repeated freezing and thawing.

**Precautions** FBX09 / FBXO9 Antibody (aa431-447) is for research use only and not for use in diagnostic or therapeutic procedures.

#### FBX09 / FBXO9 Antibody (aa431-447) - Protein Information

Name FBXO9

Synonyms FBX9, VCIA1

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 and plays a role in several biological processes such as cell cycle, cell proliferation, or maintenance of chromosome stability (PubMed:<a

href="http://www.uniprot.org/citations/23263282" target="\_blank">23263282</a>, PubMed:<a href="http://www.uniprot.org/citations/34480022" target="\_blank">34480022</a>). Ubiquitinates



mTORC1-bound TTI1 and TELO2 when they are phosphorylated by CK2 following growth factor deprivation, leading to their degradation. In contrast, does not mediate ubiquitination of TTI1 and TELO2 when they are part of the mTORC2 complex. As a consequence, mTORC1 is inactivated to restrain cell growth and protein translation, while mTORC2 is the activated due to the relief of feedback inhibition by mTORC1 (PubMed:<a href="http://www.uniprot.org/citations/23263282" target="\_blank">>23263282</a>). Plays a role in maintaining epithelial cell survival by regulating the turn- over of chromatin modulator PRMT4 through ubiquitination and degradation by the proteasomal pathway (PubMed:<a href="http://www.uniprot.org/citations/34480022" target="\_blank">>34480022</a>). Regulates also PPARgamma stability by facilitating PPARgamma/PPARG ubiquitination and thereby plays a role in adipocyte differentiation (By similarity).

Cellular Location Cytoplasm.

### FBX09 / FBXO9 Antibody (aa431-447) - Protocols

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

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

FBX09 / FBXO9 Antibody (aa431-447) - Images



Anti-FBXO9 antibody IHC of human pancreas.



Anti-FBOX9 Antibody - Western Blot.

## FBX09 / FBXO9 Antibody (aa431-447) - Background

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 TTI1 and TELO2 in a CK2-dependent manner, thereby directly regulating mTOR signaling. SCF(FBXO9) recognizes and binds mTORC1-bound TTI1 and TELO2 when they are phosphorylated by CK2 following growth factor deprivation, leading to their degradation. In contrast, the SCF(FBXO9) does not mediate ubiquitination of TTI1 and TELO2 when they are part of the mTORC2 complex. As a consequence, mTORC1 is inactivated to restrain cell growth and protein translation, while mTORC2 is activated due to the relief of feedback inhibition by mTORC1.

# FBX09 / FBXO9 Antibody (aa431-447) - References

Winston J.T., et al.Curr. Biol. 9:1180-1182(1999). Deng H.-X., et al.Submitted (DEC-2004) to the EMBL/GenBank/DDBJ databases. Bechtel S., et al.BMC Genomics 8:399-399(2007). Ota T., et al.Nat. Genet. 36:40-45(2004). Totoki Y., et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.