

FBX022 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56090**Specification****FBX022 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC
Primary Accession	Q8NEZ5
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FBX022
Epitope Specificity	21-120/403
Isotype	IgG
Purity affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY Important Note	Contains 1 F-box domain. This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

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 the 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 and, as a transcriptional target of the tumor protein p53, is thought to be involved in degradation of specific proteins in response to p53 induction. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2010]

FBX022 Polyclonal Antibody - Additional Information**Gene ID** 26263**Other Names**

F-box only protein 22, F-box protein FBX22p44, FBX022, FBX22

Target/Specificity

Predominantly expressed in liver.

Dilution

WB~~1:1000<br \><span class

=IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

FBX022 Polyclonal Antibody - Protein Information

Name FBX022

Synonyms FBX22

Function

Substrate-recognition component of the SCF (SKP1-CUL1-F-box protein)-type E3 ubiquitin ligase complex that is implicated in the control of various cellular processes such as cell cycle control, transcriptional regulation, DNA damage repair, and apoptosis. Promotes the proteasome-dependent degradation of key sarcomeric proteins, such as alpha-actinin (ACTN2) and filamin-C (FLNC), essential for maintenance of normal contractile function. Acts as a key regulator of histone methylation marks namely H3K9 and H3K36 methylation through the regulation of histone demethylase KDM4A protein levels (PubMed:21768309). In complex with KDM4A, also regulates the abundance of TP53 by targeting methylated TP53 for degradation at the late senescent stage (PubMed:26868148). Under oxidative stress, promotes the ubiquitination and degradation of BACH1. Mechanistically, reactive oxygen species (ROS) covalently modify cysteine residues on the bZIP domain of BACH1, leading to its release from chromatin and making it accessible to FBX022 (PubMed:39504958). Upon amino acid depletion, mediates 'Lys-27'-linked ubiquitination of MTOR and thereby inhibits substrate recruitment to mTORC1 (PubMed:37979583). Also inhibits SARS- CoV-2 replication by inducing NSP5 degradation (PubMed:39223933).

Cellular Location

Cytoplasm. Nucleus. Cytoplasm, myofibril, sarcomere, Z line. Note=Amino acid depletion lead to a time-dependent increase of FBX022 in the cytoplasm.

Tissue Location

Predominantly expressed in liver, also enriched in cardiac muscle.

FBX022 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FBX022 Polyclonal Antibody - Images