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FBXO22 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18732b

Specification

FBXO22 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q8NEZ5
Other Accession	Q78JE5, NP_036302.1
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**44508**
Antigen Region	**320-347**

FBXO22 Antibody (C-term) - Additional Information

Gene ID 26263

Other Names
F-box only protein 22, F-box protein FBX22p44, FBXO22, FBX22

Target/Specificity
This FBXO22 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 320-347 amino acids from the C-terminal region of human FBXO22.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

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
FBXO22 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FBXO22 Antibody (C-term) - Protein Information

Name FBXO22

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 FBXO22 (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 FBXO22 in the cytoplasm.

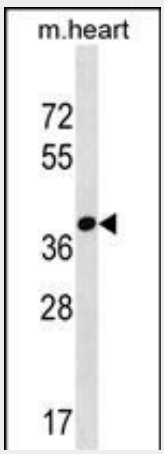
Tissue Location
Predominantly expressed in liver, also enriched in cardiac muscle.

FBXO22 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FBXO22 Antibody (C-term) - Images



FBXO22 Antibody (C-term)(Cat. #AP18732b) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the FBXO22 antibody detected the FBXO22 protein (arrow).

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FBXO22 Antibody (C-term) - 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 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. Two transcript variants encoding different isoforms exist for this gene.

FBXO22 Antibody (C-term) - References

Borziak, K., et al. Bioinformatics 23(19):2518-2521(2007)
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Winston, J.T., et al. Curr. Biol. 9(20):1180-1182(1999)
Cenciarelli, C., et al. Curr. Biol. 9(20):1177-1179(1999)