

FBX022 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56090

Specification

FBXO22 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC-P, IHC-F, IF, ICC <u>O8NEZ5</u> Rat Rabbit Polyclonal 44508

FBXO22 Polyclonal Antibody - Additional Information

Gene ID 26263

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

Dilution WB~~1:1000<br \>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.

FBXO22 Polyclonal Antibody - 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 Polyclonal Antibody - Protocols

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

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

FBXO22 Polyclonal Antibody - Images