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Pirh21 (7B9) Mouse mAb

Catalog # AP53504

Product Information

Application	WB, IHC-P, IF, FC, ICC
Primary Accession	Q96PM5
Reactivity	Rat, Human
Host	Mouse
Clonality	Monoclonal Antibody
Isotype	IgG1
Conjugate	Unconjugated
Immunogen	Purified recombinant fragment of human Pirh2 expressed in E. Coli.
Purification	Ascitic Fluid
Calculated MW	30110

Additional Information

Gene ID	25898
Other Names	ARNIP; CHIMP; RNF199; RCHY1
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A
Format	Liquid in Purified antibody in PBS with 0.05% sodium azide.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

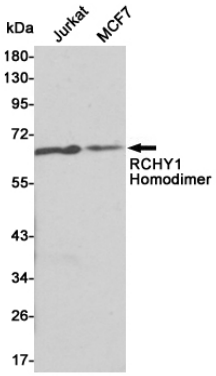
Protein Information

Name	RCHY1
Function	E3 ubiquitin-protein ligase that mediates ubiquitination of target proteins, including p53/TP53, TP73, HDAC1 and CDKN1B (PubMed:16914734, PubMed:17721809, PubMed:18006823, PubMed:19043414, PubMed:19483087, PubMed:21994467). Mediates ubiquitination and degradation of p53/TP53; preferentially acts on tetrameric p53/TP53 (PubMed:19043414, PubMed:19483087). Catalyzes monoubiquitinates the translesion DNA polymerase POLH (PubMed:21791603). Involved in the ribosome-associated quality control (RQC) pathway, which mediates the extraction of incompletely synthesized nascent chains from stalled ribosomes: RCHY1 acts downstream of NEMF and recognizes CAT tails associated with stalled nascent chains, leading to their ubiquitination and degradation (PubMed:33909987).
Cellular Location	Nucleus. Nucleus speckle. Cytoplasm

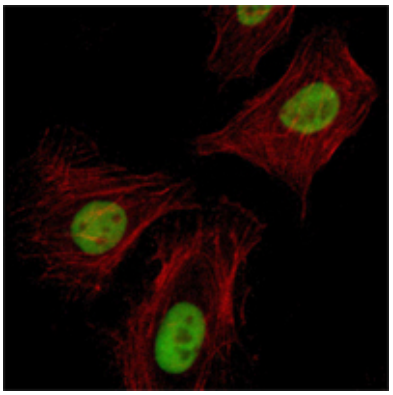
Background

Swiss-Prot Acc.Q96PM5.Pirh 2 (P53 induced RING-H2 protein), also known as RCHY1, it forms dimers through its N- and C-terminus in cells. The Pirh2 has ubiquitin-protein ligase activity and it binds with p53 and promotes the ubiquitin-mediated proteosomal degradation of p53. The Pirh2 is oncogenic because loss of p53 function contributes directly to malignant tumor development. Pirh2 expression decreases the level of p53, and a decrease of endogenous Pirh2 expression increases p53 levels. Pirh2 is therefore considered, together with MDM2, to act as a negative regulator of p53 function.

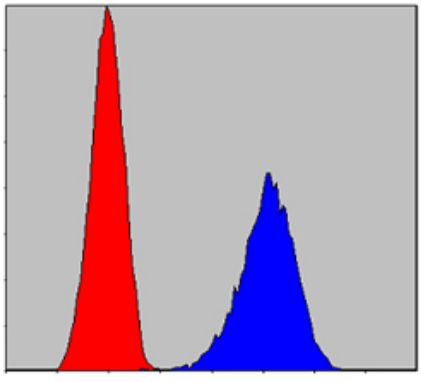
Images



Western blot detection of RCHY1 in Jurkat and MCF7 cell lysates using RCHY1 mouse mAb (1:1000 diluted).Predicted band size:30KDa.Observed band size:60KDa.

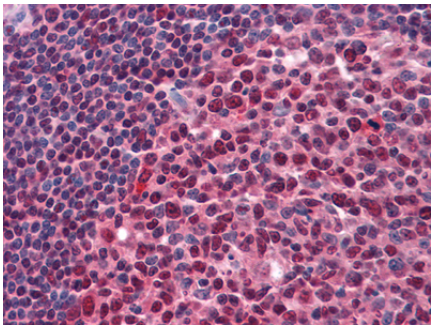


Immunofluorescence analysis of Hela cells using Pirh2 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of PC-12 cells using anti-Pirh2 mAb (blue) and negative control (red).

Immunohistochemical analysis of paraffin-embedded human Tonsil tissues using anti-Pirh2 mouse mAb



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