

Pirh21 (7B9) Mouse mAb
Catalog # AP53504**Specification****Pirh21 (7B9) Mouse mAb - Product Information**

Application	WB, IF, FC, IHC-P
Primary Accession	Q96PM5
Reactivity	Rat
Host	Mouse
Clonality	Monoclonal Antibody
Calculated MW	30110

Pirh21 (7B9) Mouse mAb - Additional Information**Gene ID** 25898**Other Names**

ARNIP; CHIMP; RNF199; RCHY1

Dilution

WB~~1:1000

Pirh21 (7B9) Mouse mAb - Protein Information**Name** RCHY1**Function**

E3 ubiquitin-protein ligase that mediates ubiquitination of target proteins, including p53/TP53, TP73, HDAC1 and CDKN1B (PubMed: [16914734](http://www.uniprot.org/citations/16914734), PubMed: [17721809](http://www.uniprot.org/citations/17721809), PubMed: [18006823](http://www.uniprot.org/citations/18006823), PubMed: [19043414](http://www.uniprot.org/citations/19043414), PubMed: [19483087](http://www.uniprot.org/citations/19483087), PubMed: [21994467](http://www.uniprot.org/citations/21994467)). Mediates ubiquitination and degradation of p53/TP53; preferentially acts on tetrameric p53/TP53 (PubMed: [19043414](http://www.uniprot.org/citations/19043414), PubMed: [19483087](http://www.uniprot.org/citations/19483087)). Catalyzes monoubiquitinates the translesion DNA polymerase POLH (PubMed: [21791603](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/33909987)).

Cellular Location

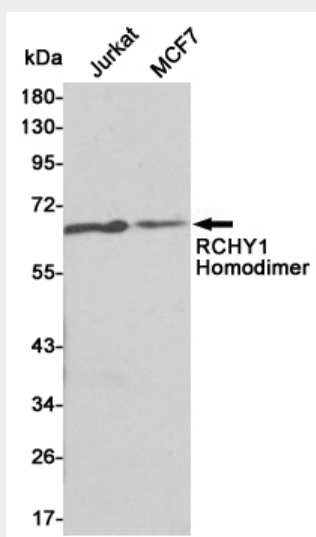
Nucleus. Nucleus speckle. Cytoplasm

Pirh21 (7B9) Mouse mAb - Protocols

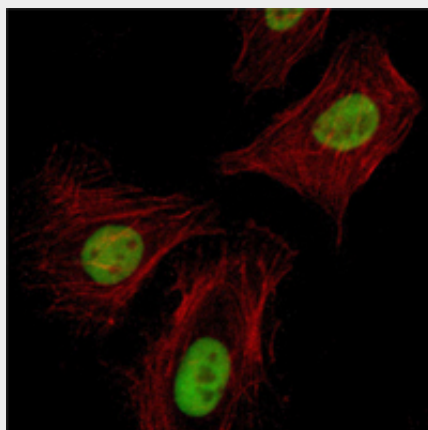
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

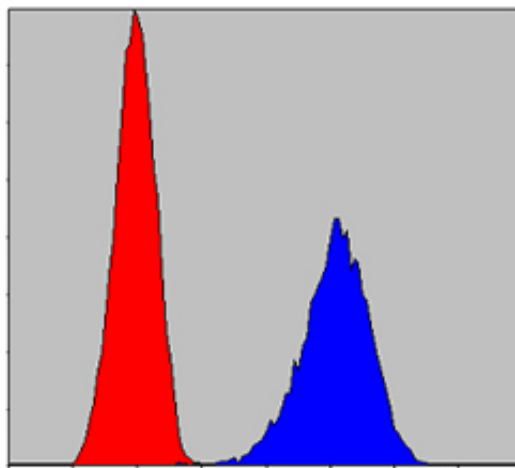
Pirh21 (7B9) Mouse mAb - Images



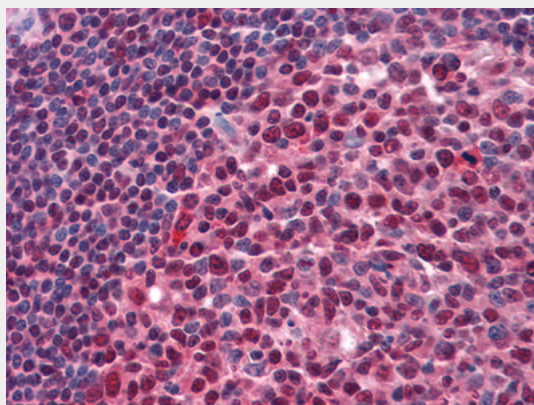
Western blot detection of RCHY1 in Jurkat and MCF7 cell lysates using RCHY1 mouse mAb (1:1000 diluted). Predicted band size: 30 kDa. Observed band size: 60 kDa.



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

Pirh21 (7B9) Mouse mAb - 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.