

RNF123 Rabbit pAb

Catalog # AP98623

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q5XPI4
Other Accession	Q5XPI4
Host	Rabbit
Clonality	Polyclonal
Calculated MW	148515
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RNF123
Epitope Specificity	1-100/1314
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 B30.2/SPRY domain. Contains 1 RING-type zinc finger.
SUBUNIT	Component of the KPC complex composed of RNF123/KPC1 and UBAC1/KPC2. Interacts with UBAC1 and CDKN1B via its N-terminal domain.
Post-translational modifications	Ubiquitinated, leading to its degradation. Deubiquitinated by USP19, thereby stimulating CDKN1B ubiquitin-dependent degradation (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in protein-protein interactions and protein-DNA interactions. RNF123 (RING finger protein 123), also known as KPC1 (Kip1 (p27) ubiquitination-promoting complex protein 1) or FP1477, contains one RING-type zinc finger domain and one SPRY domain. Localizing to the cytoplasm, RNF123 functions as the catalytic component of the KPC complex that acts as an E3 ubiquitin-protein ligase. Specifically, RNF123 is essential for the ubiquitination and subsequent degradation of p27 during the cell cycle G1 phase. Via its N-terminus, RNF123 is known to interact with GBDR1 (another component of the KPC) and p27 (a cyclin-dependent kinase inhibitor). Due to alternative splicing events, two isoforms exist for RNF123.

Additional Information

Gene ID	63891
Other Names	FP1477; KPC1; RN123_HUMAN; RNF123; Kip1 ubiquitination-promoting complex protein 1; RING finger protein 123; 2.3.2.27; Kip1 ubiquitination-promoting complex subunit 1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,Flow-Cyt=1ug/Test

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.
----------------	---

Protein Information

Name	RNF123 (HGNC:21148)
-------------	---------------------------------------

Function	Catalytic subunit of the KPC complex that acts as E3 ubiquitin-protein ligase (PubMed: 15531880 , PubMed: 16227581 , PubMed: 25860612). Promotes the ubiquitination and proteasome-mediated degradation of CDKN1B which is the cyclin-dependent kinase inhibitor at the G0-G1 transition of the cell cycle (PubMed: 15531880 , PubMed: 16227581). Also acts as a key regulator of the NF-kappa-B signaling by promoting maturation of the NFKB1 component of NF-kappa-B: acts by catalyzing ubiquitination of the NFKB1 p105 precursor, leading to limited proteasomal degradation of NFKB1 p105 and generation of the active NFKB1 p50 subunit (PubMed: 25860612 , PubMed: 33168738 , PubMed: 34873064). Also functions as an inhibitor of innate antiviral signaling mediated by RIGI and IFIH1 independently of its E3 ligase activity (PubMed: 27312109). Interacts with the N-terminal CARD domains of RIGI and IFIH1 and competes with the downstream adapter MAVS (PubMed: 27312109).
-----------------	---

Cellular Location	Cytoplasm
--------------------------	-----------

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.