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RNF5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8608a

Product Information

Application	WB, E
Primary Accession	Q99942
Other Accession	Q5M807, O35445
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22891
Calculated MW	19881
Antigen Region	1-30

Additional Information

Gene ID	6048
Other Names	E3 ubiquitin-protein ligase RNF5, 632-, Protein G16, RING finger protein 5, Ram1 homolog, HsRma1, RNF5, G16, NG2, RMA1
Target/Specificity	This RNF5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids of human RNF5.
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	RNF5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RNF5 {ECO:0000303|PubMed:9533025, ECO:0000312|HGNC:HGNC:10068}
Function	Membrane-bound E3 ubiquitin-protein ligase that mediates ubiquitination of target proteins (PubMed:11329381, PubMed:12861019, PubMed:16176924, PubMed:19269966, PubMed:19285439). May function together with E2

	ubiquitin-conjugating enzymes UBE2D1/UBCH5A and UBE2D2/UBC4 (PubMed:11329381). Mediates ubiquitination of PXN/paxillin,thereby regulating cell motility and localization of PXN/paxillin (PubMed:12861019). Catalyzes ubiquitination of Salmonella type III secreted protein sopA (PubMed:16176924). Mediates the 'Lys- 63'-linked polyubiquitination of JKAMP thereby regulating JKAMP function by decreasing its association with components of the proteasome and ERAD; the ubiquitination appears to involve E2 ubiquitin-conjugating enzyme UBE2N (PubMed:19269966). Mediates the 'Lys-48'-linked polyubiquitination of STING1 at 'Lys-150' leading to its proteasomal degradation; the ubiquitination occurs in mitochondria after viral transfection and regulates antiviral responses (PubMed:19285439). Catalyzes ubiquitination and subsequent degradation of ATG4B, thereby inhibiting autophagy (PubMed:23093945).
Cellular Location	Cell membrane; Multi-pass membrane protein. Mitochondrion membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Note=Predominantly located in the plasma membrane, with some localization occurring within cytoplasmic organelles
Tissue Location	Widely expressed..

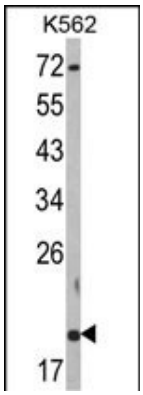
Background

RNF5 contains a RING finger, which is a motif known to be involved in protein-protein interactions. This protein is a membrane-bound ubiquitin ligase. It can regulate cell motility by targeting paxillin ubiquitination and altering the distribution and localization of paxillin in cytoplasm and cell focal adhesions.

References

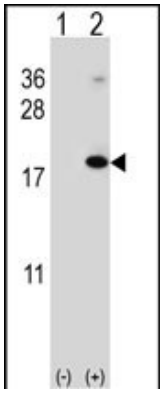
Didier,C., et.al., Mol. Cell. Biol. 23 (15), 5331-5345 (2003)
Bromberg,K.D., et.al., Cancer Res. 67 (17), 8172-8179 (2007)

Images



Western blot analysis of RNF5 Antibody (N-term) (Cat. #AP8608a) in K562 cell line lysates (35ug/lane). RNF5 (arrow) was detected using the purified Pab.

Western blot analysis of RNF5 (arrow) using rabbit polyclonal RNF5 Antibody (N-term) (Cat. #AP8608a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the RNF5 gene.



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