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RNF5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12440c

Product Information

Application	IHC-P, WB, E
Primary Accession	Q99942
Other Accession	Q5M807, O35445, NP_008844.1
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31124
Calculated MW	19881
Antigen Region	65-94

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 65-94 amino acids of human RNF5.
Dilution	IHC-P~~1:100~500 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 (Center) 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..

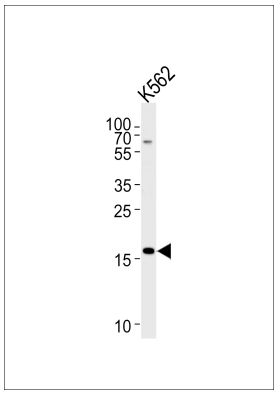
Background

The protein encoded by this gene 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

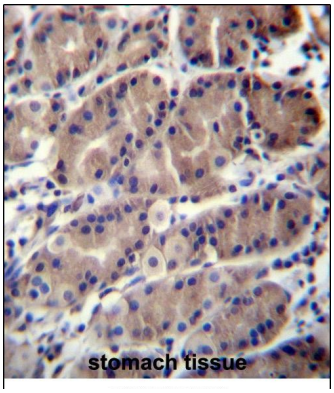
Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) :
Tcherpakov, M., et al. J. Biol. Chem. 284(18):12099-12109(2009)
Zhong, B., et al. Immunity 30(3):397-407(2009)
McKinnon, E., et al. Diabetes Obes Metab 11 SUPPL 1, 92-100 (2009) :
Bromberg, K.D., et al. Cancer Res. 67(17):8172-8179(2007)

Images



Western blot analysis of lysate from K562 cell line, using RNF5 Antibody (Center)(Cat. #AP12440c). AP12440c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

RNF5 Antibody (Center) (Cat. #AP12440c)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the



use of RNF5 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- VAMP-associated Proteins (VAP) as Receptors That Couple Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) Proteostasis with Lipid Homeostasis.