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RNF115 Antibody

Rabbit mAb
Catalog # AP93030

Product Information

Application	WB
Primary Accession	Q9Y4L5
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	BCA2; RNF115;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	33703

Additional Information

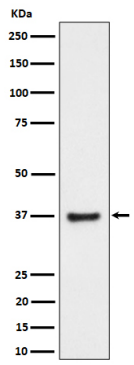
Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human RNF115
Description	Acts as an E2-dependent E3 ubiquitin-protein ligase. May be involved in endocytic trafficking.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	RNF115 (HGNC:18154)
Function	E3 ubiquitin-protein ligase that catalyzes the 'Lys- 48'- and/or 'Lys-63'-linked polyubiquitination of various substrates and thereby plays a role in a number of signaling pathways including autophagy, innate immunity, cell proliferation and cell death (PubMed:20019814, PubMed:30689267). Plays a role in the endosomal trafficking and degradation of membrane receptors including EGFR, FLT3, MET and CXCR4 through their polyubiquitination. Participates together with BST2 in antiviral immunity by facilitating the internalization of HIV-1 virions into intracellular vesicles leading to their lysosomal degradation (PubMed:20019814). Also possesses an antiviral activity independently of BST2 by promoting retroviral GAG proteins ubiquitination, redistribution to endo-lysosomal compartments and, ultimately, lysosomal degradation (PubMed:24852021). Catalyzes distinct types of ubiquitination on MAVS and STING1 at different phases of viral infection to promote innate antiviral response (PubMed:33139700). Mediates the 'Lys-48'-linked ubiquitination of MAVS leading to its proteasomal degradation and ubiquitinates STING1 via 'Lys-63'-linked polyubiquitination, critical for its oligomerization and the subsequent recruitment of TBK1 (PubMed:33139700). Plays a positive role in

	the autophagosome-lysosome fusion by interacting with STX17 and enhancing its stability without affecting 'Lys-48'- or 'Lys-63'-linked polyubiquitination levels, which in turn promotes autophagosome maturation (PubMed:32980859). Negatively regulates TLR-induced expression of proinflammatory cytokines by catalyzing 'Lys-11'-linked ubiquitination of RAB1A and RAB13 to inhibit post-ER trafficking of TLRs to the Golgi by RAB1A and subsequently from the Golgi apparatus to the cell surface by RAB13 (PubMed:35343654).
Cellular Location	Cytoplasm. Nucleus Endoplasmic reticulum. Golgi apparatus. Note=The GTP-bound form of RAB7A recruits RNF115 from the cytosol onto late endosomes/lysosomes
Tissue Location	Expressed at extremely low levels in normal breast, prostate, lung, colon. Higher levels of expression are detected in heart, skeletal muscle, testis as well as in breast and prostate cancer cells.

Images



Western blot analysis of RNF115 expression in PC-3 cell lysate.