

# RNF115 Antibody

Rabbit mAb Catalog # AP93030

# Specification

# **RNF115 Antibody - Product Information**

Application Primary Accession Reactivity Clonality <b>Other Names</b> BCA2; RNF115;	WB <u>09Y4L5</u> Rat Monoclonal
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	33703 Da

# **RNF115 Antibody - Additional Information**

Dilution Purification	WB~~1:1000 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.

# **RNF115 Antibody - 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:<a href="http://www.uniprot.org/citations/20019814" target="\_blank">20019814</a>, PubMed:<a href="http://www.uniprot.org/citations/20019814" target="\_blank">20019814</a>). 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:<a href="http://www.uniprot.org/citations/20019814" target="\_blank">20019814" target="\_blank">20019814" target="\_blank">20019814" target="\_blank">20019814" target="\_blank">20019814</a>). Also possesses an antiviral activity independently of BST2 by promoting retroviral GAG proteins ubiquitination, redistribution to endo-lysosomal compartments and, ultimately, lysosomal degradation (PubMed:<a



href="http://www.uniprot.org/citations/24852021" target="\_blank">24852021</a>). Catalyzes distinct types of ubiquitination on MAVS and STING1 at different phases of viral infection to promote innate antiviral response (PubMed:<a href="http://www.uniprot.org/citations/33139700" target="\_blank">33139700</a>). 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:<a href="http://www.uniprot.org/citations/33139700" target="\_blank">33139700</a>). 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:<a

href="http://www.uniprot.org/citations/32980859" target="\_blank">32980859</a>). 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:<a href="http://www.uniprot.org/citations/35343654" target=" blank">35343654</a>).

#### **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.

# **RNF115 Antibody - Protocols**

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**RNF115 Antibody - Images** 





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