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BCA2/ZNF364 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58507

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9Y4L5
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33703
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ZNF364/BCA2/RNF115
Epitope Specificity	161-260/304
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytosol (By similarity). Note=The GTP-bound form of RAB7A recruits RNF115 from the cytosol onto late endosomes/lysosomes (By similarity).
SIMILARITY	Contains 1 RING-type zinc finger.
SUBUNIT	Interacts with RAB7A.
Post-translational modifications	RING-type zinc finger-dependent and E2-dependent autoubiquitination.
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 finger family of proteins possess ubiquitin ligase activity and play pivotal roles in protein degradation and receptor-mediated endocytosis. The autoubiquitination activity of ZNF364 indicates that it is a novel RING-type E3 ligase. Its effects on cell growth indicate that ZNF364 may be important for the ubiquitin modification of proteins crucial to breast carcinogenesis and growth.

Additional Information

Gene ID	27246
Other Names	E3 ubiquitin-protein ligase RNF115, 2.3.2.27, RING finger protein 115 {ECO:0000312|HGNC:HGNC:18154}, RING-type E3 ubiquitin transferase RNF115, Rabring 7, RNF115 (HGNC:18154)
Target/Specificity	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.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000

	-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	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.