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Goat Anti-Rabring 7 / BCA2 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1898a

Specification

Goat Anti-Rabring 7 / BCA2 Antibody - Product Information

Application	**WB, E**
Primary Accession	Q9Y4L5
Other Accession	NP_055270, 27246, 67845 (mouse), 362002 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5mg/ml**
Isotype	**IgG**
Calculated MW	**33703**

Goat Anti-Rabring 7 / BCA2 Antibody - Additional Information

Gene ID 27246

Other Names
E3 ubiquitin-protein ligase RNF115, 6.3.2.-, RING finger protein 115 {ECO:0000312|HGNC:HGNC:18154}, Rabring 7, RNF115 (HGNC:18154)

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Rabring 7 / BCA2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Rabring 7 / BCA2 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: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.

Goat Anti-Rabring 7 / BCA2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Rabring 7 / BCA2 Antibody - Images

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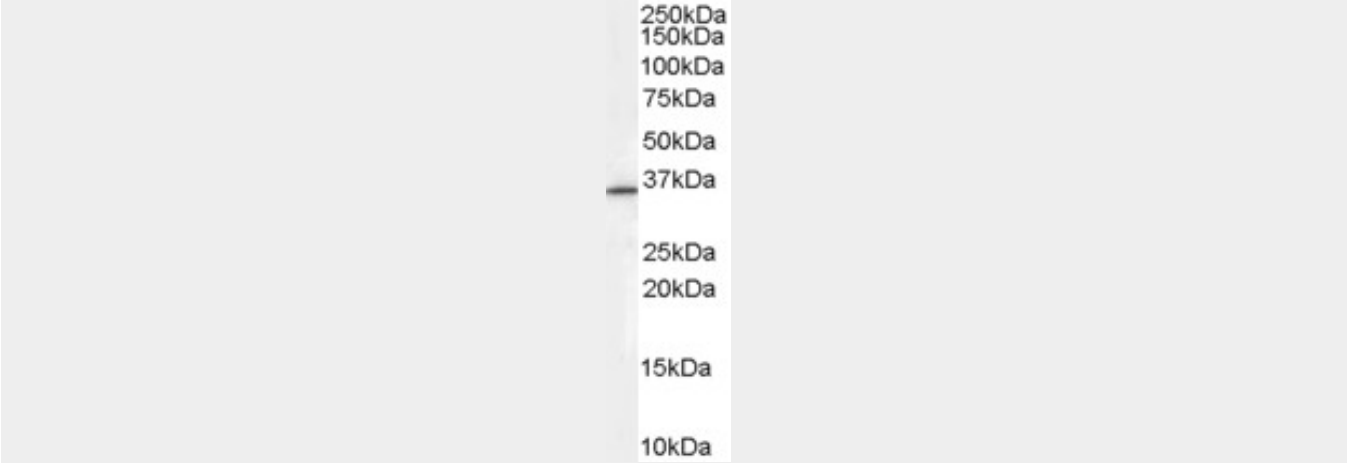

AF1898a (0.3 µg/ml) staining of HEPG2 cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Rabring 7 / BCA2 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496. BCA2/Rabring7 promotes tetherin-dependent HIV-1 restriction. Miyakawa K, et al. PLoS Pathog, 2009 Dec. PMID 20019814. Autoubiquitination of BCA2 RING E3 ligase regulates its own stability and affects cell migration. Amemiya Y, et al. Mol Cancer Res, 2008 Sep. PMID 18819927. Involvement of Rabring7 in EGF receptor degradation as an E3 ligase. Sakane A, et al. Biochem Biophys Res Commun, 2007 Jun 15. PMID 17462600.