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RNF31 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19285b

Product Information

Application	WB, E
Primary Accession	Q96EP0
Other Accession	NP_060469.4
Reactivity	Human
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39346
Calculated MW	119652
Antigen Region	955-983

Additional Information

Gene ID	55072
Other Names	E3 ubiquitin-protein ligase RNF31, 632-, HOIL-1-interacting protein, HOIP, RING finger protein 31, Zinc in-between-RING-finger ubiquitin-associated domain protein, RNF31, ZIBRA
Target/Specificity	This RNF31 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 955-983 amino acids from the C-terminal region of human RNF31.
Dilution	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	RNF31 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RNF31 (HGNC:16031)
Function	E3 ubiquitin-protein ligase component of the LUBAC complex which

conjugates linear ('Met-1'-linked) polyubiquitin chains to substrates and plays a key role in NF-kappa-B activation and regulation of inflammation (PubMed:17006537, PubMed:19136968, PubMed:20005846, PubMed:21455173, PubMed:21455180, PubMed:21455181, PubMed:22863777, PubMed:28189684, PubMed:28481331). LUBAC conjugates linear polyubiquitin to IKBKG and RIPK1 and is involved in activation of the canonical NF-kappa-B and the JNK signaling pathways (PubMed:17006537, PubMed:19136968, PubMed:20005846, PubMed:21455173, PubMed:21455180, PubMed:21455181, PubMed:22863777, PubMed:28189684). Linear ubiquitination mediated by the LUBAC complex interferes with TNF- induced cell death and thereby prevents inflammation (PubMed:21455173, PubMed:28189684). LUBAC is recruited to the TNF-R1 signaling complex (TNF-RSC) following polyubiquitination of TNF-RSC components by BIRC2 and/or BIRC3 and to conjugate linear polyubiquitin to IKBKG and possibly other components contributing to the stability of the complex (PubMed:20005846, PubMed:27458237). The LUBAC complex is also involved in innate immunity by conjugating linear polyubiquitin chains at the surface of bacteria invading the cytosol to form the ubiquitin coat surrounding bacteria (PubMed:28481331, PubMed:34012115). LUBAC is not able to initiate formation of the bacterial ubiquitin coat, and can only promote formation of linear polyubiquitins on pre-existing ubiquitin (PubMed:28481331). Recruited to the surface of bacteria by RNF213, which initiates the bacterial ubiquitin coat (PubMed:34012115). The bacterial ubiquitin coat acts as an 'eat-me' signal for xenophagy and promotes NF-kappa-B activation (PubMed:28481331, PubMed:34012115). Together with OTULIN, the LUBAC complex regulates the canonical Wnt signaling during angiogenesis (PubMed:23708998). RNF31 is required for linear ubiquitination of BCL10, thereby promoting TCR-induced NF-kappa- B activation (PubMed:27777308). Binds polyubiquitin of different linkage types (PubMed:23708998).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q924T7}.

Tissue Location Expressed in both normal and transformed breast epithelial cell lines.

Background

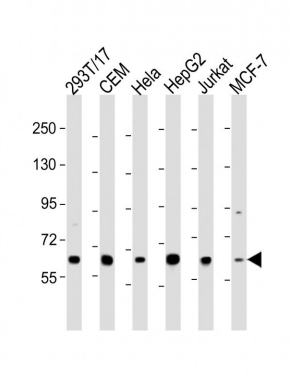
The protein encoded by this gene contains a RING finger, a motif present in a variety of functionally distinct proteins and known to be involved in protein-DNA and protein-protein interactions.

References

Silva, L.K., et al. Eur. J. Hum. Genet. (2010) In press : Ehrlund, A., et al. Mol. Cell. Biol. 29(8):2230-2242(2009) Tokunaga, F., et al. Nat. Cell Biol. 11(2):123-132(2009) Kirisako, T., et al. EMBO J. 25(20):4877-4887(2006) Lim, J., et al. Cell 125(4):801-814(2006)

Images

All lanes : Anti-RNF31 Antibody (C-term) at 1:2000 dilution Lane 1: 293T/17 whole cell lysate Lane 2: CEM whole cell lysate Lane 3: Hela whole cell lysate Lane 4: HepG2 whole cell lysate Lane 5: Jurkat whole cell lysate Lane 6: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 120 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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