

RNF135 Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19376b

Product Information

Application WB, E **Primary Accession Q8IUD6 Other Accession** NP 115698.3 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB39664 **Calculated MW** 47888 375-401 **Antigen Region**

Additional Information

Gene ID 84282

Other Names E3 ubiquitin-protein ligase RNF135, 632-, RIG-I E3 ubiquitin ligase, REUL, RING

finger protein 135, Riplet, RNF135

Target/Specificity This RNF135 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 375-401 amino acids from the

C-terminal region of human RNF135.

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 RNF135 Antibody(C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name RNF135 (<u>HGNC:21158</u>)

Function E2-dependent E3 ubiquitin-protein ligase that functions as a RIGI coreceptor

in the sensing of viral RNAs in cell cytoplasm and the activation of the antiviral

innate immune response (PubMed: 19017631, PubMed: 19484123,

PubMed:<u>21147464</u>, PubMed:<u>23950712</u>, PubMed:<u>28469175</u>, PubMed:<u>31006531</u>). Together with the UBE2D3, UBE2N and UB2V1 E2 ligases, catalyzes the 'Lys-63'-linked polyubiquitination of RIGI oligomerized on viral RNAs, an essential step in the activation of the RIG-I signaling pathway (PubMed:<u>19017631</u>, PubMed:<u>21147464</u>, PubMed:<u>28469175</u>, PubMed:<u>31006531</u>). Through a ubiquitin-independent parallel mechanism, which consists in bridging RIGI filaments forming on longer viral RNAs, further activates the RIG-I signaling pathway (PubMed:<u>31006531</u>). This second mechanism that synergizes with the ubiquitin-dependent one would thereby allow an RNA length-dependent regulation of the RIG-I signaling pathway (Probable). Associated with the E2 ligase UBE2N, also constitutively synthesizes unanchored 'Lys-63'-linked polyubiquitin chains that may also activate the RIG-I signaling pathway (PubMed:<u>28469175</u>, PubMed:<u>31006531</u>).

Cellular Location

Cytoplasm. Cytoplasm, Stress granule

Tissue Location

Expressed in skeletal muscle, spleen, kidney, placenta, prostate, stomach, thyroid and tongue. Also weakly expressed in heart, thymus, liver and lung.

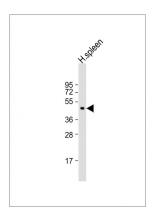
Background

The protein encoded by this gene contains a RING finger domain, a motif present in a variety of functionally distinct proteins and known to be involved in protein-protein and protein-DNA interactions. This gene is located in a chromosomal region known to be frequently deleted in patients with neurofibromatosis. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq].

References

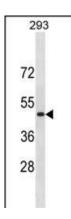
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You, F., et al. Nat. Immunol. 10(12):1300-1308(2009)
Visser, R., et al. Am. J. Med. Genet. A 149A (4), 806-808 (2009):
Oshiumi, H., et al. J. Biol. Chem. 284(2):807-817(2009)
Gao, D., et al. PLoS ONE 4 (6), E5760 (2009):

Images



Anti-RNF135 Antibody (C-term) at 1:500 dilution + human spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

RNF135 Antibody (C-term)(Cat. #AP19376b) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the RNF135 antibody detected the RNF135 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.