10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RNF128 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19347c

Product Information

Application	WB, E
Primary Accession	Q8TEB7
Other Accession	Q29RU0, NP_078815.3
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40302
Calculated MW	46521
Antigen Region	115-143

Additional Information

Gene ID	79589
Other Names	E3 ubiquitin-protein ligase RNF128, 632-, Gene related to anergy in lymphocytes protein, GRAIL, RING finger protein 128, RNF128
Target/Specificity	This RNF128 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 115-143 amino acids from the Central region of human RNF128.
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	RNF128 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RNF128
Function	E3 ubiquitin-protein ligase that catalyzes 'Lys-27', 'Lys- 48'- or 'Lys-63'-linked polyubiquitin chains formation and plays a role in different biological

	processes such as modulation of immune response, cytoskeletal dynamics or protein homeostasis. Inhibits IL2 and IL4 transcription, thereby playing an important role in the induction of the anergic phenotype, a long-term stable state of T- lymphocyte unresponsiveness to antigenic stimulation associated with the blockade of interleukin production (PubMed:12705856). Ubiquitinates ARPC5 with 'Lys-48' linkages and COR1A with 'Lys-63' linkages leading to their degradation, down-regulation of these cytoskeletal components results in impaired lamellipodium formation and reduced accumulation of F-actin at the immunological synapse (PubMed:22016387). Functions in the patterning of the dorsal ectoderm; sensitizes ectoderm to respond to neural-inducing signals. Plays a positive role in innate immune response by promoting 'Lys-63'-linked ubiquitination of TBK1 after RNA- or DNA-virus infection (PubMed:27776110). Regulates alveolar macrophage activation and neutrophil infiltration by interacting with TLR4, targeting it for degradation, and inhibiting NF-kappa-B activation, hence decreasing pro-inflammatory cytokines (PubMed:37344492). Negatively regulates the IL-3/STAT5 signaling pathway by facilitating 'Lys-27'-linked polyubiquitination of IL3RA leading to its degradation via lysosomal pathway (PubMed:38702781). Directly regulates the N-glycosylation process in the endoplasmic reticulum by targeting the glycosyl-transferase RPN1 for ubiquitination and degradation (PubMed:39567208). Other substrates targeted for degradation by RNF128 include transmembrane proteins CD40L, CD83 or the tetraspanin CD151 (PubMed:18713730, PubMed:19542455).
Cellular Location	Cytoplasm. Endomembrane system; Single-pass membrane protein Cytoplasm, cytoskeleton. Cytoplasm, perinuclear region. Note=Localized in an asymmetric perinuclear punctate manner. Localizes to the internal pool of the transferrin recycling endosomal pathway. Partially colocalized with the endoplasmic reticulum resident HSPA5, with Golgi resident STX5, and with the late endosomal GTPase RAB7A (By similarity).

Background

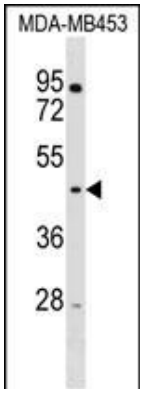
The protein encoded by this gene is a type I transmembrane protein that localizes to the endocytic pathway. This protein contains a RING zinc-finger motif and has been shown to possess E3 ubiquitin ligase activity. Expression of this gene in retrovirally transduced T cell hybridoma significantly inhibits activation-induced IL2 and IL4 cytokine production. Induced expression of this gene was observed in anergic CD4(+) T cells, which suggested a role in the induction of anergic phenotype. Alternatively spliced transcript variants encoding distinct isoforms have been reported.

References

Su, L.L., et al. J. Immunol. 183(1):438-444(2009)
Lin, J.T., et al. J. Immunol. 182(10):5919-5928(2009)
Lineberry, N., et al. J. Biol. Chem. 283(42):28497-28505(2008)
Egawa, S., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 295 (1), G163-G169 (2008) :
Kostianovsky, A.M., et al. J. Immunol. 178(10):6158-6163(2007)

Images

RNF128 Antibody (Center)(Cat. #AP19347c) western blot analysis in MDA-MB453 cell line lysates (35ug/lane).This demonstrates the RNF128 antibody detected the RNF128 protein (arrow).



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