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RNF128 Rabbit pAb

Catalog # AP98258

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q8TEB7
Other Accession	Q8TEB7
Reactivity	Rat, Human, Mouse
Predicted	Pig, Zebrafish, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46521
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RNF128
Epitope Specificity	151-260/428
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 PA (protease associated) domain.Contains 1 RING-type zinc finger.
Post-translational modifications	Auto-ubiquitinated. Controls the development of T-cell clonal anergy by ubiquitination.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	79589
Other Names	GRAIL; 1300002C13Rik; Greul1; RGD1566282; RN128_HUMAN; RNF128; Gene related to anergy in lymphocytes protein (GRAIL); RING finger protein 128; RING-type E3 ubiquitin transferase RNF128; 2.3.2.27; RN128_MOUSE; Gene related to anergy in lymphocytes protein; Goliath-related E3 ubiquitin-protein ligase 1; ring finger protein 128, E3 ubiquitin protein ligase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200
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	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).

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