

# RNF128 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI12260

#### **Product Information**

Application WB
Primary Accession Q8TEB7

Other Accession <u>NM 194463, NP 919445</u>

**Reactivity** Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine

**Predicted** Human, Mouse, Rat, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 46521

### **Additional Information**

**Gene ID** 79589

Alias Symbol FLJ23516, GRAIL

Other Names E3 ubiquitin-protein ligase RNF128, 6.3.2.-, Gene related to anergy in

lymphocytes protein, GRAIL, RING finger protein 128, RNF128

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

**Reconstitution & Storage** Add 100 ul of distilled water. Final anti-RNF128 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

**Precautions** RNF128 antibody - C-terminal region 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

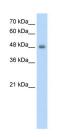
leading to their degradation, down-regulation of these cytoskeletal components results in impaired lamellipodium formation and reduced

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: <u>27776110</u>). 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: <u>37344492</u>). Negatively regulates the IL-3/STAT5 signaling pathway by facilitating 'Lys-27'-linked polyubiquitination of IL3RA leading to its degradation via lysosomal pathway (PubMed:<u>38702781</u>). 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).

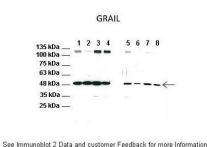
#### **Cellular Location**

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).

## **Images**



WB Suggested Anti-RNF128 Antibody Titration: 1.25µg/ml Positive Control: HepG2 cell lysate RNF128 is supported by BioGPS gene expression data to be expressed in HepG2



Lanes: 1: CD4 T cell lysate

from WT mice, 2: CD4 T cell lysate

from WT mice treated with anti-CD3/CD28, 3: CD4 T cell

lysate

from WT mice treated with FK506, 4: CD4 T cell lysate from WT mice treated with anti-CD3/CD28 and FK506, 5:

CD4 T cell lysate

from TRPV1 KO mice, 6: CD4 T cell lysate

from TRPV1 KO mice treated with anti-CD3/CD28, 7: CD4

T cell lysate

from TRPV1 KO mice treated with FK506, 8: CD4 T cell

from TRPV1 KO mice treated with anti-CD3/CD28 and

FK506.

Primary Antibody Dilution: 1:1000 Secondary Antibody: Anti-rabbit HRP Secondary Antibody Dilution: 1:10,000

Gene Name: RNF128

Submitted by: Christine Quinley, UCSD

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