

#### **RNF128 Antibody (Center) Blocking Peptide** Synthetic peptide

Catalog # BP19347c

## Specification

# **RNF128 Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

## <u>Q8TEB7</u>

## **RNF128** Antibody (Center) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## **RNF128 Antibody (Center) Blocking Peptide - Protein Information**

Name RNF128

Function

E3 ubiguitin-protein ligase that catalyzes 'Lys-27', 'Lys- 48'- or 'Lys-63'-linked polyubiguitin 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 Tlymphocyte unresponsiveness to antigenic stimulation associated with the blockade of interleukin production (PubMed:<a href="http://www.uniprot.org/citations/12705856" target=" blank">12705856</a>). Ubiguitinates 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:<a href="http://www.uniprot.org/citations/22016387" target=" blank">22016387</a>). 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:<a href="http://www.uniprot.org/citations/27776110" target=" blank">27776110</a>). 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:<a href="http://www.uniprot.org/citations/37344492" target=" blank">37344492</a>).



Negatively regulates the IL-3/STAT5 signaling pathway by facilitating 'Lys-27'-linked polyubiquitination of IL3RA leading to its degradation via lysosomal pathway (PubMed:<a href="http://www.uniprot.org/citations/38702781" target="\_blank">38702781</a>). Directly regulates the N-glycosylation process in the endoplasmic reticulum by targeting the glycosyl-transferase RPN1 for ubiquitination and degradation (PubMed:<a href="http://www.uniprot.org/citations/39567208" target="\_blank">39567208</a>). Other substrates targeted for degradation by RNF128 include transmembrane proteins CD40L, CD83 or the tetraspanin CD151 (PubMed:<a href="http://www.uniprot.org/citations/18713730" target="\_blank">18713730</a>, PubMed:<a href="http://www.uniprot.org/citations/19542455" target="\_blank">19542455</a>

#### **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).

## **RNF128 Antibody (Center) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

## <u>Blocking Peptides</u>

## RNF128 Antibody (Center) Blocking Peptide - Images

## **RNF128 Antibody (Center) Blocking Peptide - Background**

The protein encoded by this gene is a type I transmembraneprotein that localizes to the endocytic pathway. This proteincontains a RING zinc-finger motif and has been shown to possess E3ubiquitin ligase activity. Expression of this gene in retrovirallytransduced T cell hybridoma significantly inhibitsactivation-induced IL2 and IL4 cytokine production. Inducedexpression 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 distinctisoforms have been reported.

## **RNF128 Antibody (Center) Blocking Peptide - 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)