

Anti-RNF25 (RABBIT) Antibody

RNF25 Antibody Catalog # ASR5379

Specification

Anti-RNF25 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated

Target Species Human

Reactivity Human, Mouse Clonality **Polyclonal**

Application WB, E, IP, I, LCI **Application Note** This affinity purified antibody has been

tested for use in ELISA, western blot and immunoprecipitation. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 54 kDa in size corresponding to RNF25 protein

by western blotting in the appropriate cell

lysate or extract. **Liquid (sterile filtered) Physical State**

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen This affinity purified antibody was prepared from whole rabbit serum

produced by repeated immunizations with a synthetic peptide corresponding to amino acids near the carboxyl terminus of

human RNF25 protein.

Preservative 0.01% (w/v) Sodium Azide

Anti-RNF25 (RABBIT) Antibody - Additional Information

Gene ID 64320

Other Names

64320

Purity

This affinity purified antibody is directed against human RNF25 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. The antibody also recognizes mouse RNF25 protein. Reactivity against homologues from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.



Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-RNF25 (RABBIT) Antibody - Protein Information

Name RNF25 {ECO:0000303|PubMed:36638793, ECO:0000312|HGNC:HGNC:14662}

Function

E3 ubiquitin-protein ligase that plays a key role in the RNF14-RNF25 translation quality control pathway, a pathway that takes place when a ribosome has stalled during translation, and which promotes ubiquitination and degradation of translation factors on stalled ribosomes (PubMed:36638793, PubMed:37651229, PubMed:37951216). Catalyzes ubiquitination of RPS27A in response to ribosome collisions, promoting activation of RNF14 (PubMed:36638793). RNF25 catalyzes ubiquitination of other ribosomal proteins on stalled ribosomes, such as RPLO, RPL1, RPL12, RPS13 and RPS17 (PubMed: 36638793). Also involved in ubiquitination and degradation of stalled ETF1/eRF1 (PubMed: 36638793, PubMed:37651229). Independently of its function in the response to stalled ribosomes, mediates ubiquitination and subsequent proteasomal degradation of NKD2 (By similarity). May also stimulate transcription mediated by NF-kappa-B via its interaction with RELA/p65 (PubMed:12748188).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q7SXJ6}.

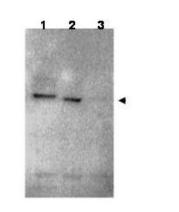
Anti-RNF25 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-RNF25 (RABBIT) Antibody - Images





Western blot using Rockland's affinity purified anti-RNF25 antibody shows detection of RNF25 (arrow head) in HEK293 cells over-expressing human RNF25 (lane 1) or mouse RNF25 (lane 2). Lane 3 is a vector only control. The extracts were loaded onto a gel, followed by electrophoresis and transfer to nitrocellulose. The membrane was probed with the primary antibody diluted to 1:1,000. Personal Communication, Allan Weissman, CCR-NCI, Bethesda, MD.

Anti-RNF25 (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. RING finger protein 25 (RNF25, also named AO7) contains a RING finger domain and is ubiquitously expressed in various tissues. RNF25 was initially identified in a yeast two-hybrid screen of a murine T-cell library by using UbcH5b, an E2 enzyme, as bait. RNF25 has also been shown to act as a putative E3 ligase, at least in vitro. RNF25 localizes predominantly in the nucleus and supports the transcriptional activity of NF-kB by interacting with p65 in vivo upon stimulation with TNF. Yeast two-hybrid data also suggest that RNF25 interacts with a number of other molecules which may be potential ubiquitin ligase substrates. Among these are molecules that have critical roles in signal transduction and in regulation of translation (personal communication, Allan Weissman, CCR-NCI, Bethesda, MD).