

RNF14 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17648b

Specification

RNF14 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q9UBS8

Other Accession <u>NP 899646.1</u>, <u>NP 004281.1</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
336-364

RNF14 Antibody (C-term) - Additional Information

Gene ID 9604

Other Names

E3 ubiquitin-protein ligase RNF14, 632-, Androgen receptor-associated protein 54, HFB30, RING finger protein 14, Triad2 protein, RNF14, ARA54

Target/Specificity

This RNF14 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 336-364 amino acids from the C-terminal region of human RNF14.

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

RNF14 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RNF14 Antibody (C-term) - Protein Information

Name RNF14 {ECO:0000303|PubMed:36638793, ECO:0000312|HGNC:HGNC:10058}



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: <u>36638793</u>, PubMed: <u>37651229</u>, PubMed: <u>37951215</u>, PubMed: <u>37951216</u>). Recruited to stalled ribosomes by the ribosome collision sensor GCN1 and mediates 'Lys-6'-linked ubiquitination of target proteins, leading to their degradation (PubMed: 36638793, PubMed: 37651229, PubMed: 37951215, PubMed: 37951216). Mediates ubiquitination of EEF1A1/eEF1A and ETF1/eRF1 translation factors on stalled ribosomes, leading to their degradation (PubMed: 36638793, PubMed: 37651229). Also catalyzes ubiquitination of ribosomal proteins RPL0, RPL1, RPL12, RPS13 and RPS17 (PubMed: 36638793). Specifically required to resolve RNA-protein cross-links caused by reactive aldehydes, which trigger translation stress by stalling ribosomes: acts by catalying 'Lys-6'-linked ubiquitination of RNA-protein cross-links, leading to their removal by the ATP-dependent unfoldase VCP and subsequent degradation by the proteasome (PubMed:37951215, PubMed:37951216). Independently of its function in the response to stalled ribosomes, acts as a regulator of transcription in Wnt signaling via its interaction with TCF transcription factors (TCF7/TCF1, TCF7L1/TCF3 and TCF7L2/TCF4) (PubMed: 23449499). May also play a role as a coactivator for androgen- and, to a lesser extent, progesterone-dependent transcription (PubMed: 19345326).

Cellular Location Cytoplasm. Nucleus

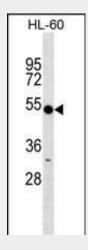
Tissue Location Widely expressed...

RNF14 Antibody (C-term) - Protocols

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

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

RNF14 Antibody (C-term) - Images







RNF14 Antibody (C-term) (Cat. #AP17648b) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the RNF14 antibody detected the RNF14 protein (arrow).

RNF14 Antibody (C-term) - Background

The protein encoded by this gene contains a RING zinc finger, a motif known to be involved in protein-protein interactions. This protein interacts with androgen receptor (AR) and may function as a coactivator that induces AR target gene expression in prostate. A dominant negative mutant of this gene has been demonstrated to inhibit the AR-mediated growth of prostate cancer. This protein also interacts with class III ubiquitin-conjugating enzymes (E2s) and may act as a ubiquitin-ligase (E3) in the ubiquitination of certain nuclear proteins. Five alternatively spliced transcript variants encoding two distinct isoforms have been reported.

RNF14 Antibody (C-term) - References

Xu, K., et al. Cancer Cell 15(4):270-282(2009) Lan, K.C., et al. Fertil. Steril. 89 (5 SUPPL), 1397-1405 (2008): Kikuchi, H., et al. Carcinogenesis 28(8):1752-1758(2007) Yang, Z., et al. Endocrinology 148(3):1340-1349(2007) Yang, Z., et al. Mol. Endocrinol. 21(2):343-358(2007)