

RNF14 Antibody

Rabbit mAb Catalog # AP92914

Specification

RNF14 Antibody - Product Information

Application WB
Primary Accession Q9UBS8
Reactivity Rat

Clonality Monoclonal

Other Names

ARA54; HFB30; Rnf14; TRIAD2;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 53837 Da

RNF14 Antibody - Additional Information

Dilution WB~~1:1000

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

RNF14

Description Might act as an E3 ubiquitin-protein ligase

which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes and then transfers it to substrates, which could be nuclear proteins. Could play a role as a coactivator for androgen- and, to a lesser

extent, progesterone-dependent

transcription.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

RNF14 Antibody - 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:36638793, PubMed:37651229, PubMed:37951215, PubMed:37951216). 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 RPLO, 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 - Protocols

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

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

RNF14 Antibody - Images



