

RNF14 Rabbit mAb

Catalog # AP76695

Product Information

Application WB
Primary Accession Q9UBS8

Reactivity Human, Mouse, Rat

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 53837

Additional Information

Gene ID 9604

Other Names RNF14

Dilution WB~~1/500-1/1000

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

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:<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:<u>36638793</u>, PubMed:<u>37651229</u>,

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,

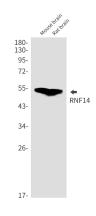
PubMed:<u>37951216</u>). Independently of its function in the response to stalled ribosomes, acts as a regulator of transcription in Wnt signaling via its interaction with TCF transcription factors (TCF7/TCF1, TCF7L1/TCF3 and

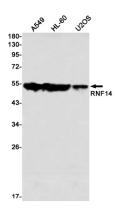
TCF7L2/TCF4) (PubMed:<u>23449499</u>). May also play a role as a coactivator for androgen- and, to a lesser extent, progesterone-dependent transcription (PubMed:<u>19345326</u>).

Cellular Location Cytoplasm. Nucleus

Tissue Location Widely expressed..

Images





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