10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-RNF14 Rabbit Monoclonal Antibody

Catalog # ABO16374

Product Information

Application	WB
Primary Accession	Q9UBS8
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-RNF14 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	9604
Other Names	E3 ubiquitin-protein ligase RNF14, 2.3.2.31, Androgen receptor-associated protein 54, HFB30, RING finger protein 14, RNF14 {ECO:0000303|PubMed:36638793, ECO:0000312|HGNC:HGNC:10058}
Calculated MW	53837
Application Details	WB 1:500-1:2000
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 29R10
Immunogen	A synthesized peptide derived from human RNF14
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

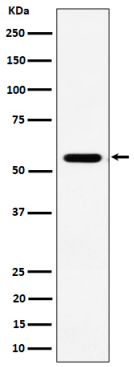
Name	RNF14 {ECO:0000303|PubMed:36638793, ECO:0000312|HGNC:HGNC:10058}
Function	E3 ubiquitin-protein ligase that plays a key role in the RNF14-RNF25 translation quality control pathway, a pathway that takes place when a ribosome has stalled during translation, and which promotes ubiquitination

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 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..

Images



Western blot analysis of RNF14 expression in Jurkat cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.