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RNF14 Rabbit pAb

Catalog # AP97245

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9UBS8
Other Accession	Q9UBS8
Reactivity	Rat, Mouse
Predicted	Pig, Human, Rabbit, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53837
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RNF14
Epitope Specificity	71-170/474
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the RBR family. RNF14 subfamily. Contains 1 IBR-type zinc finger. Contains 2 RING-type zinc fingers. Contains 1 RWD domain.
SUBUNIT	Interacts with the ubiquitin-conjugating enzymes UBE2E1 and UBE2E2. Interacts with AR/androgen receptor; testosterone- and RNF6-regulated it promotes AR transcriptional activity.
Post-translational modifications	RING-type zinc finger-dependent and UBE2E2-dependent autoubiquitination.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	9604
Other Names	ARA54; HFB30; HRIHFB2038; TRIAD2; 2310075C09Rik; 2610005D23Rik; D18Ertd188e; D7Bwg0165e; RNF14_HUMAN; RNF14; Androgen receptor-associated protein 54; RING finger protein 14; 2.3.2.31; RNF14_MOUSE
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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..

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