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RNF14 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP17648b

Specification

RNF14 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9UBS8

RNF14 Antibody (C-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RNF14 Antibody (C-term) Blocking Peptide - 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..

RNF14 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

RNF14 Antibody (C-term) Blocking Peptide - Images

RNF14 Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene contains a RING zincfinger, a motif known to be involved in protein-proteininteractions. This protein interacts with androgen receptor (AR)and may function as a coactivator that induces AR target geneexpression in prostate. A dominant negative mutant of this gene hasbeen demonstrated to inhibit the AR-mediated growth of prostatecancer. This protein also interacts with class IIIubiquitin-conjugating enzymes (E2s) and may act as aubiquitin-ligase (E3) in the ubiquitination of certain nuclearproteins. Five alternatively spliced transcript variants encodingtwo distinct isoforms have been reported.

RNF14 Antibody (C-term) Blocking Peptide - 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)