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TRIP12 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21854c

Specification

TRIP12 Blocking Peptide (Center) - Product Information

Primary Accession	Q14669
Other Accession	E1B7Q7, F1RCR6, G5E870, F1LP64

TRIP12 Blocking Peptide (Center) - Additional Information

Gene ID 9320

Other Names
E3 ubiquitin-protein ligase TRIP12, 632-, E3 ubiquitin-protein ligase for Arf, ULF, Thyroid receptor-interacting protein 12, TR-interacting protein 12, TRIP-12, TRIP12, KIAA0045, ULF

Target/Specificity
The synthetic peptide sequence is selected from aa 1011-1023 of HUMAN TRIP12

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.

TRIP12 Blocking Peptide (Center) - Protein Information

Name TRIP12

Synonyms KIAA0045, ULF

Function
E3 ubiquitin-protein ligase involved in ubiquitin fusion degradation (UFD) pathway and regulation of DNA repair (PubMed:19028681, PubMed:22884692). Part of the ubiquitin fusion degradation (UFD) pathway, a process that mediates ubiquitination of protein at their N-terminus, regardless of the presence of lysine residues in target proteins (PubMed:19028681). Acts as a key regulator of DNA damage response by acting as a suppressor of RNF168, an E3 ubiquitin-protein ligase that promotes accumulation of 'Lys-63'-linked histone H2A and H2AX at DNA damage sites, thereby acting as a guard against excessive spreading of ubiquitinated chromatin at damaged chromosomes (PubMed:22884692). In normal

cells, mediates ubiquitination and degradation of isoform p19ARF/ARF of CDKN2A, a lysine-less tumor suppressor required for p53/TP53 activation under oncogenic stress (PubMed:20208519). In cancer cells, however, isoform p19ARF/ARF and TRIP12 are located in different cell compartments, preventing isoform p19ARF/ARF ubiquitination and degradation (PubMed:20208519). Does not mediate ubiquitination of isoform p16-INK4a of CDKN2A (PubMed:20208519). Also catalyzes ubiquitination of NAE1 and SMARCE1, leading to their degradation (PubMed:18627766). Ubiquitination and degradation of target proteins is regulated by interaction with proteins such as MYC, TRADD or SMARCC1, which disrupt the interaction between TRIP12 and target proteins (PubMed:20829358). Mediates ubiquitination of ASXL1: following binding to N(6)-methyladenosine methylated DNA, ASXL1 is ubiquitinated by TRIP12, leading to its degradation and subsequent inactivation of the PR-DUB complex (PubMed:30982744).

Cellular Location
Nucleus, nucleoplasm

TRIP12 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

TRIP12 Blocking Peptide (Center) - Images

TRIP12 Blocking Peptide (Center) - Background

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TRIP12 Blocking Peptide (Center) - References

Chen D.,et al.Nature 464:624-627(2010).
Nomura N.,et al.DNA Res. 1:223-229(1994).
Hillier L.W.,et al.Nature 434:724-731(2005).
Lee J.W.,et al.Mol. Endocrinol. 9:243-254(1995).
Olsen J.V.,et al.Cell 127:635-648(2006).