

TRIP12 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS15172**Specification**

TRIP12 Antibody - Product Information

Application	IHC
Primary Accession	Q14669
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	220kDa KDa

TRIP12 Antibody - Additional Information**Gene ID** 9320**Other Names**

E3 ubiquitin-protein ligase TRIP12, 6.3.2.-, E3 ubiquitin-protein ligase for Arf, ULF, Thyroid receptor-interacting protein 12, TR-interacting protein 12, TRIP-12, TRIP12, KIAA0045, ULF

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

TRIP12 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TRIP12 Antibody - 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

Volume

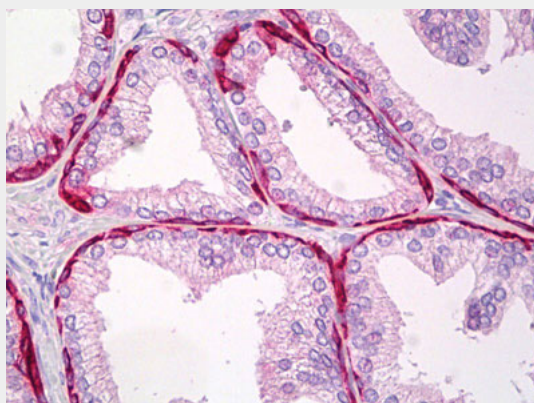
50 µl

TRIP12 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TRIP12 Antibody - Images



Anti-TRIP12 antibody IHC of human prostate.

TRIP12 Antibody - Background

E3 ubiquitin-protein ligase involved in ubiquitin fusion degradation (UFD) pathway and regulation of DNA repair. 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. 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. In cancer cells, however, isoform p19ARF/ARF and TRIP12 are located in different cell compartments, preventing isoform p19ARF/ARF ubiquitination and degradation. Does not mediate ubiquitination of isoform p16-INK4a of CDKN2A. Also catalyzes ubiquitination of NAE1 and SMARCE1, leading to their degradation. 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. 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.

TRIP12 Antibody - 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).