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

TRIP12 Rabbit pAb

Catalog # AP99937

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q14669
Other Accession	Q14669
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	228484
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TRIP12
Epitope Specificity	61-160/1992
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 UPL family. K-HECT subfamily. Belongs to the UPL family. K-HECT subfamily. Belongs to the UPL family. K-HECT subfamily.
SUBUNIT	Interacts with MYC; leading to disrupt interaction with isoform p19ARF/ARF of CDKN2A. Interacts with TRADD; leading to disrupt interaction with isoform p19ARF/ARF of CDKN2A. Interacts with SMARCC1; leading to disrupt interaction with SMARCE1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	TRIP12 (thyroid hormone receptor interactor 12) is an ATP-dependent multisubunit protein that activates the proteolytic activities of the multifunctional proteinase (20S proteasome) of the 26S complex. TRP12 specifically interacts with the ligand binding domain of the thyroid hormone receptor (in a thyroid hormone T3-independent manner) and with retinoid X receptor (RXR). TRP12 was originally identified as a factor that interacts with the thyroid hormone receptor. It was later found to also interact with AAP-BP1, a component of the NEDD8 –activating enzyme, and function as an E3 ubiquitin ligase for AAP-BP1.

Additional Information

Gene ID	9320
Other Names	MRD49; TRIP-12; TRIPC; ULF; TRIPC_HUMAN; TRIP12; E3 ubiquitin-protein ligase for Arf (ULF); HECT-type E3 ubiquitin transferase TRIP12; Thyroid receptor-interacting protein 12 (TR-interacting protein 12 | TRIP-12); 2.3.2.26; KIAA0045; thyroid hormone receptor interactor 12; E3 ubiquitin-protein ligase for Arf
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

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	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, PubMed:40419785). 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

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