

TRIM27 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14892B

Specification

TRIM27 Antibody (C-term) - Product Information

Application WB,E
Primary Accession P14373

Other Accession <u>Q62158</u>, <u>NP 006501.1</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
Assignment Season
Assignment Season
Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
Assignment Season

TRIM27 Antibody (C-term) - Additional Information

Gene ID 5987

Other Names

Zinc finger protein RFP, 632-, RING finger protein 76, Ret finger protein, Tripartite motif-containing protein 27, TRIM27, RFP, RNF76

Target/Specificity

This TRIM27 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 453-482 amino acids from the C-terminal region of human TRIM27.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TRIM27 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TRIM27 Antibody (C-term) - Protein Information

Name TRIM27 {ECO:0000303|PubMed:22128329, ECO:0000312|HGNC:HGNC:9975}



Function E3 ubiquitin-protein ligase that mediates ubiquitination of various substrates and thereby plays a role in diffent processes including proliferation, innate immunity, apoptosis, immune response or autophagy (PubMed:22829933, PubMed:24144979, PubMed:29688809, PubMed:36111389). Ubiquitinates PIK3C2B and inhibits its activity by mediating the formation of 'Lys-48'-linked polyubiquitin chains; the function inhibits CD4 T-cell activation. Acts as a regulator of retrograde transport: together with MAGEL2, mediates the formation of 'Lys-63'-linked polyubiquitin chains at 'Lys-220' of WASHC1, leading to promote endosomal F-actin assembly (PubMed: <u>23452853</u>). Has a transcriptional repressor activity by cooperating with EPC1. Induces apoptosis by activating Jun N-terminal kinase and p38 kinase and also increases caspase-3-like activity independently of mitochondrial events. May function in male germ cell development. Has DNA-binding activity and preferentially bound to double-stranded DNA. Forms a complex with and ubiquitinates the ubiquitin-specific protease USP7, which in turn deubiquitinates RIPK1 resulting in the positive regulation of TNF-alpha-induced apoptosis (PubMed: 24144979). In addition, acts with USP7 or PTPN11 as an inhibitor of the antiviral signaling pathway by promoting kinase TBK1 ubiquitination and degradation (PubMed: 26358190, PubMed: 29688809). Acts as a negative regulator of NOD2 signaling by mediating ubiquitination of NOD2, promoting its degradation by the proteasome (PubMed: 22829933). Alternatively, facilitates mitophagy via stabilization of active TBK1 (PubMed: <u>36111389</u>). Negatively regulates autophagy flux under basal conditions by directly polyubiquitinating ULK1 (PubMed: 35670107). During starvation-induced autophagy, catalyzes non-degradative ubiquitination of the kinase STK38L promoting its activation and phosphorylation of ULK1 leading to its ubiquitination and degradation to restrain the amplitude and duration of autophagy (PubMed:35670107).

Cellular Location

Nucleus. Cytoplasm. Nucleus, PML body. Early endosome. Mitochondrion. Note=Nuclear or cytoplasmic depending on the cell type (By similarity). Colocalized with PML and EIF3S6 in nuclear bodies. Recruited to retromer-containing endosomes via interaction with MAGEL2 (PubMed:23452853). Co-localizes with p62/SQSTM1 and TBK1 in cytoplasmic structures that are closely associated with the mitochondria (PubMed:36111389). {ECO:0000250, ECO:0000269|PubMed:23452853, ECO:0000269|PubMed:36111389}

Tissue Location

Expressed in testis namely within the seminiferous tubules.

TRIM27 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRIM27 Antibody (C-term) - Images



TRIM27 Antibody (C-term) (Cat. #AP14892b) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the TRIM27 antibody detected the TRIM27 protein (arrow).

17

TRIM27 Antibody (C-term) - Background

This gene encodes a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. This protein localizes to the nuclear matrix. It interacts with the enhancer of polycomb protein and represses gene transcription. It is also thought to be involved in the differentiation of male germ cells. Fusion of the N-terminus of this protein with the truncated C-terminus of the RET gene product has been shown to result in production of the ret transforming protein.

TRIM27 Antibody (C-term) - References

Johnson, A.D., et al. Nat. Genet. 42(7):608-613(2010) Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) : Tezel, G.G., et al. Pathol. Res. Pract. 205(6):403-408(2009) Li, X., et al. Virology 360(2):419-433(2007) Lim, J., et al. Cell 125(4):801-814(2006)