

**TRIM28 / KAP1 Antibody (C-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16737****Specification****TRIM28 / KAP1 Antibody (C-Terminus) - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">O13263</a>
Other Accession	<a href="#">10155</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	88550

**TRIM28 / KAP1 Antibody (C-Terminus) - Additional Information****Gene ID** 10155**Other Names**

TRIM28, E3 SUMO-protein ligase TRIM28, KRIP-1, Nuclear corepressor KAP-1, KAP-1, KAP1, KRAB-interacting protein 1, TIF1B, RNF96, TIF1-beta, TIF1beta, Tripartite motif-containing 28, KRAB-associated protein 1, RING finger protein 96, TF1B, Tif1beta zi ...

**Target/Specificity**

At least three isoforms of TRIM28 are known to exist; this antibody will detect all three isoforms.

**Reconstitution & Storage**

PBS, 0.02% sodium azide. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

**Precautions**

TRIM28 / KAP1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**TRIM28 / KAP1 Antibody (C-Terminus) - Protein Information****Name** TRIM28 ([HGNC:16384](#))**Synonyms** KAP1, RNF96, TIF1B**Function**

Nuclear corepressor for KRAB domain-containing zinc finger proteins (KRAB-ZFPs). Mediates gene silencing by recruiting CHD3, a subunit of the nucleosome remodeling and deacetylation (NuRD) complex, and SETDB1 (which specifically methylates histone H3 at 'Lys-9' (H3K9me)) to the promoter regions of KRAB target genes. Enhances transcriptional repression by coordinating the increase in H3K9me, the decrease in histone H3 'Lys-9' and 'Lys-14' acetylation (H3K9ac and H3K14ac, respectively) and the disposition of HP1 proteins to silence gene expression. Recruitment of SETDB1 induces heterochromatinization. May play a role as a coactivator for

CEBPB and NR3C1 in the transcriptional activation of ORM1. Also a corepressor for ERBB4. Inhibits E2F1 activity by stimulating E2F1-HDAC1 complex formation and inhibiting E2F1 acetylation. May serve as a partial backup to prevent E2F1-mediated apoptosis in the absence of RB1. Important regulator of CDKN1A/p21(CIP1). Has E3 SUMO-protein ligase activity toward itself via its PHD-type zinc finger. Also specifically sumoylates IRF7, thereby inhibiting its transactivation activity. Ubiquitinates p53/TP53 leading to its proteasomal degradation; the function is enhanced by MAGEC2 and MAGEA2, and possibly MAGEA3 and MAGEA6. Mediates the nuclear localization of KOX1, ZNF268 and ZNF300 transcription factors. In association with isoform 2 of ZFP90, is required for the transcriptional repressor activity of FOXP3 and the suppressive function of regulatory T-cells (Treg) (PubMed:<a href="http://www.uniprot.org/citations/23543754" target="\_blank">23543754</a>). Probably forms a corepressor complex required for activated KRAS-mediated promoter hypermethylation and transcriptional silencing of tumor suppressor genes (TSGs) or other tumor-related genes in colorectal cancer (CRC) cells (PubMed:<a href="http://www.uniprot.org/citations/24623306" target="\_blank">24623306</a>). Required to maintain a transcriptionally repressive state of genes in undifferentiated embryonic stem cells (ESCs) (PubMed:<a href="http://www.uniprot.org/citations/24623306" target="\_blank">24623306</a>). In ESCs, in collaboration with SETDB1, is also required for H3K9me3 and silencing of endogenous and introduced retroviruses in a DNA-methylation independent-pathway (By similarity). Associates at promoter regions of tumor suppressor genes (TSGs) leading to their gene silencing (PubMed:<a href="http://www.uniprot.org/citations/24623306" target="\_blank">24623306</a>). The SETDB1-TRIM28-ZNF274 complex may play a role in recruiting ATRX to the 3'-exons of zinc-finger coding genes with atypical chromatin signatures to establish or maintain/protect H3K9me3 at these transcriptionally active regions (PubMed:<a href="http://www.uniprot.org/citations/27029610" target="\_blank">27029610</a>).

#### Cellular Location

Nucleus Note=Associated with centromeric heterochromatin during cell differentiation through CBX1 (By similarity). Localizes to sites of DNA damage (PubMed:25593309).  
{ECO:0000250|UniProtKB:Q62318, ECO:0000269|PubMed:25593309}

#### Tissue Location

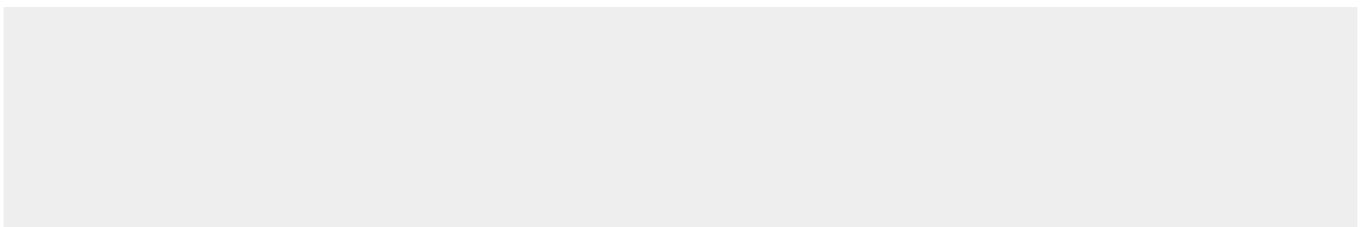
Expressed in all tissues tested including spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes.

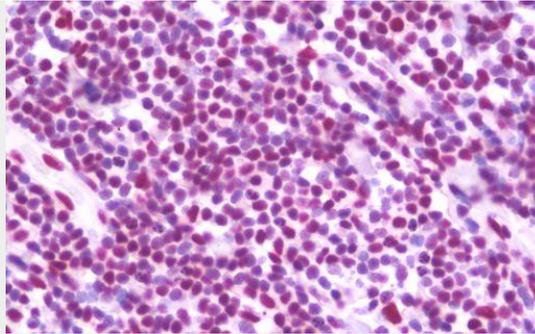
### TRIM28 / KAP1 Antibody (C-Terminus) - Protocols

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

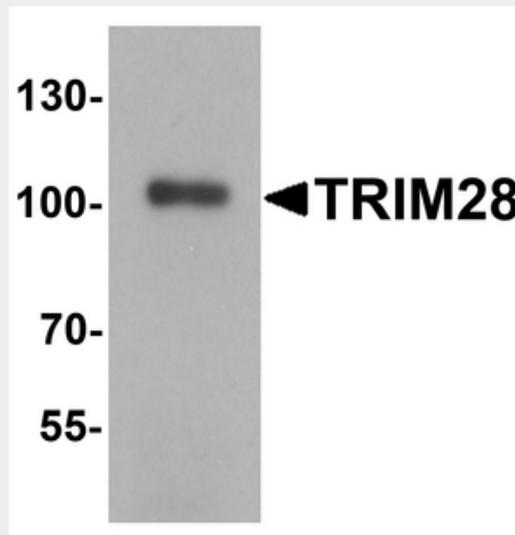
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### TRIM28 / KAP1 Antibody (C-Terminus) - Images





Anti-TRIM28 / KAP-1 antibody IHC staining of human tonsil.



Western blot analysis of TRIM28 in human testis tissue lysate with TRIM28 antibody at 1 ug/ml.

#### **TRIM28 / KAP1 Antibody (C-Terminus) - Background**

Nuclear corepressor for KRAB domain-containing zinc finger proteins (KRAB-ZFPs). Mediates gene silencing by recruiting CHD3, a subunit of the nucleosome remodeling and deacetylation (NuRD) complex, and SETDB1 (which specifically methylates histone H3 at 'Lys-9' (H3K9me)) to the promoter regions of KRAB target genes. Enhances transcriptional repression by coordinating the increase in H3K9me, the decrease in histone H3 'Lys-9 and 'Lys-14' acetylation (H3K9ac and H3K14ac, respectively) and the disposition of HP1 proteins to silence gene expression. Recruitment of SETDB1 induces heterochromatinization. May play a role as a coactivator for CEBPB and NR3C1 in the transcriptional activation of ORM1. Also corepressor for ERBB4. Inhibits E2F1 activity by stimulating E2F1-HDAC1 complex formation and inhibiting E2F1 acetylation. May serve as a partial backup to prevent E2F1-mediated apoptosis in the absence of RB1. Important regulator of CDKN1A/p21(CIP1). Has E3 SUMO-protein ligase activity toward itself via its PHD-type zinc finger. Also specifically sumoylates IRF7, thereby inhibiting its transactivation activity. Ubiquitinates p53/TP53 leading to its proteosomal degradation; the function is enhanced by MAGEC2 and MAGEA2, and possibly MAGEA3 and MAGEA6. Mediates the nuclear localization of KOX1, ZNF268 and ZNF300 transcription factors.

#### **TRIM28 / KAP1 Antibody (C-Terminus) - References**

- Friedman J.R., et al. *Genes Dev.* 10:2067-2078(1996).
- Moosmann P.R., et al. *Nucleic Acids Res.* 24:4859-4867(1996).
- Emison E.S., et al. Submitted (MAR-1997) to the EMBL/GenBank/DDBJ databases.
- Bienvenut W.V., et al. Submitted (MAY-2006) to UniProtKB.

Bienvenut W.V.,et al.Submitted (JAN-2010) to UniProtKB.