

## KAP1 / TIF1 beta Antibody

Purified Mouse Monoclonal Antibody (Mab)  
Catalog # AP52671-100 □

### Specification

#### KAP1 / TIF1 beta Antibody - Product Information

Application	WB, ICC, IP, IHC
Primary Accession	<a href="#">Q13263</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	110 kDa

#### KAP1 / TIF1 beta Antibody - Additional Information

Gene ID 10155

#### Other Names

E3 SUMO protein ligase TRIM28;E3 SUMO-protein ligase TRIM28;FLJ29029;KAP 1;KAP-1;KRAB associated protein 1;KRAB interacting protein 1;KRAB-associated protein 1;KRAB-interacting protein 1;KRIP 1;KRIP-1;KRIP1;Nuclear corepressor KAP 1;Nuclear corepressor KAP-1;RING finger protein 96;RNF96;TIF1B;TIF1 beta;TIF1-beta;TIF1B;TIF1B\_HUMAN; Transcription intermediary factor 1 beta;Transcription intermediary factor 1-beta; TRIM28;Tripartite motif containing 28;tripartite motif containing protein 28;Tripartite motif-containing protein 28.

#### Dilution

WB~~1:1000  
ICC~~1:100  
IP~~1:500  
IHC~~1:100

#### Format

Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.02% sodium azide, 50% glycerol

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

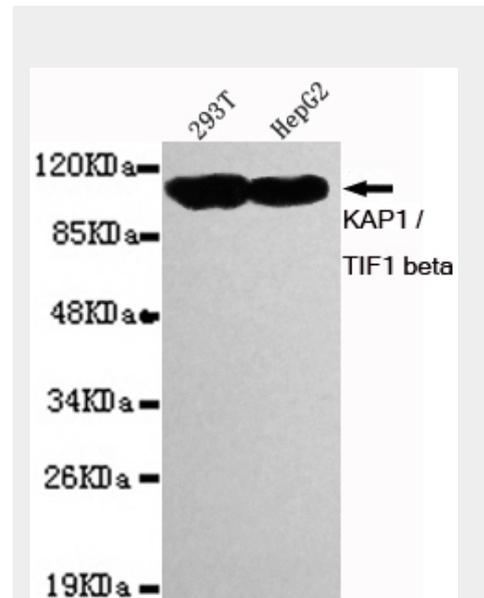
#### KAP1 / TIF1 beta Antibody - Protein Information

Name TRIM28

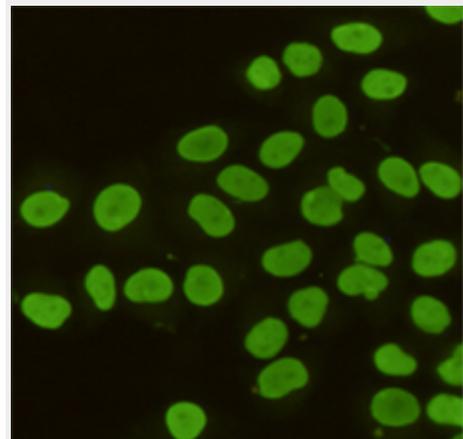
Synonyms KAP1, RNF96, TIF1B

#### 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



Western blot detection of KAP1 / TIF1 beta in 293T and HepG2 cell lysates using KAP1 / TIF1 beta mouse mAb (1:1000 diluted). Observed band size: 110kDa.



Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-KAP1 / TIF1 beta mouse mAb (dilution 1:100).

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. 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>). Acts as a corepressor for ZFP568 (By similarity).

#### Cellular Location

Nucleus. Note=Associated with centromeric heterochromatin during cell differentiation through CBX1

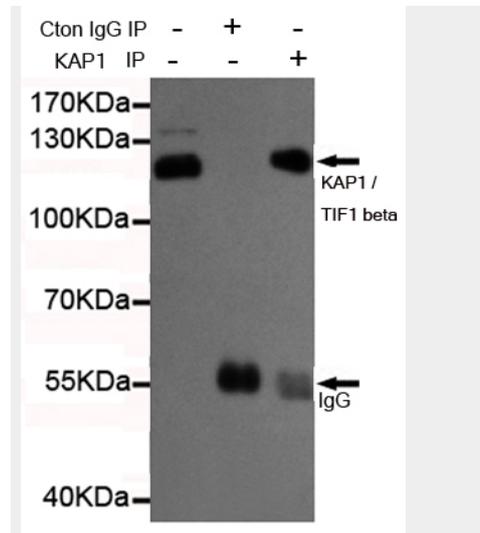
#### Tissue Location

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

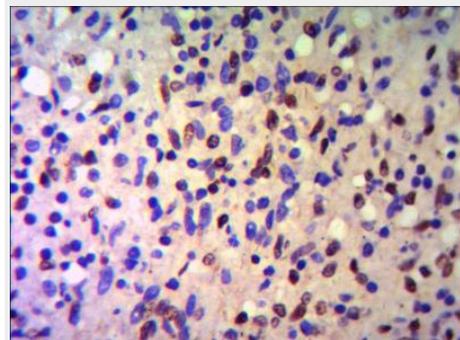
#### KAP1 / TIF1 beta Antibody - Protocols

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](#)



Immunoprecipitation analysis of HeLa cell lysates using KAP1 / TIF1 beta mouse mAb.



IHC of paraffin-embedded human Spleen using anti-KAP1 / TIF1 beta diluted 1/500-1/1000.

## KAP1 / TIF1 beta Antibody - Background

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## KAP1 / TIF1 beta Antibody - References

Friedman J.R., et al. *Genes Dev.* 10:2067-2078(1996).  
Moosmann P.R., et al. *Nucleic Acids Res.* 24:4859-4867(1996).  
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