

**KAP1 / TIF1 beta Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AP52671**

**Specification**

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

Application	IP, WB, IHC, ICC
Primary Accession	<a href="#">O13263</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;TF1B;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**

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

**Format**

Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.09% (W/V) 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 ([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 H3K9me<sub>3</sub> 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 H3K9me<sub>3</sub> 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

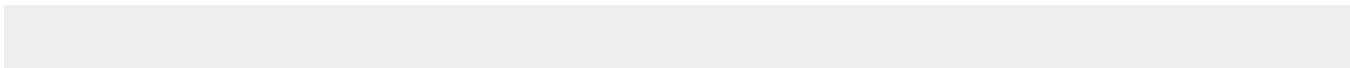
Expressed in all tissues tested including spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes.

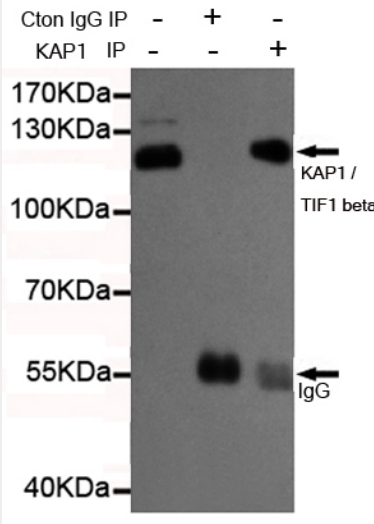
### KAP1 / TIF1 beta Antibody - Protocols

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

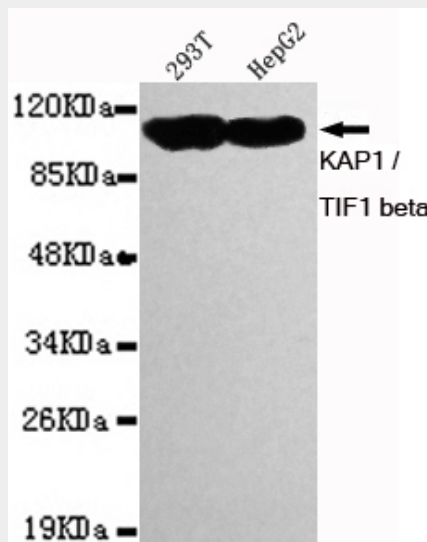
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### KAP1 / TIF1 beta Antibody - Images

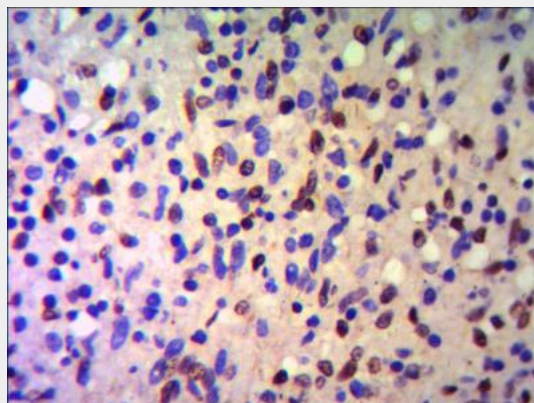




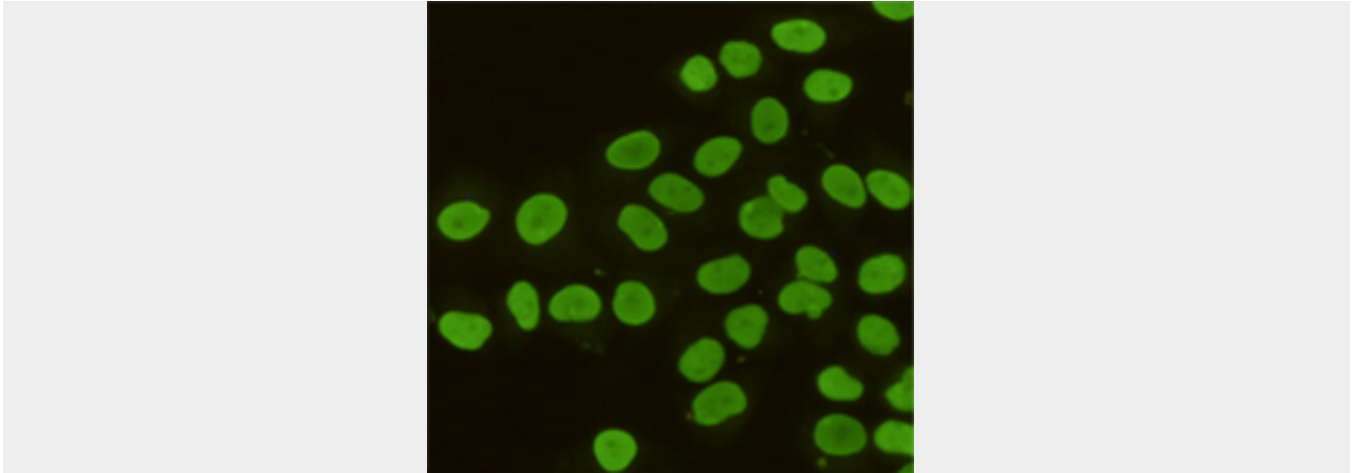
Immunoprecipitation analysis of HeLa cell lysates using KAP1 / TIF1 beta mouse mAb.



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.



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



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

### **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).  
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.