10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

KAP1 / TIF1 beta Antibody - Product Information

Application	**IP, WB, IHC, ICC**
Primary Accession	Q13263
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:23543754). 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:24623306). Required to maintain a transcriptionally repressive state of genes in undifferentiated embryonic stem cells (ESCs) (PubMed:24623306). 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:24623306). 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:27029610).

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 Cytomety
- Cell Culture

KAP1 / TIF1 beta Antibody - Images

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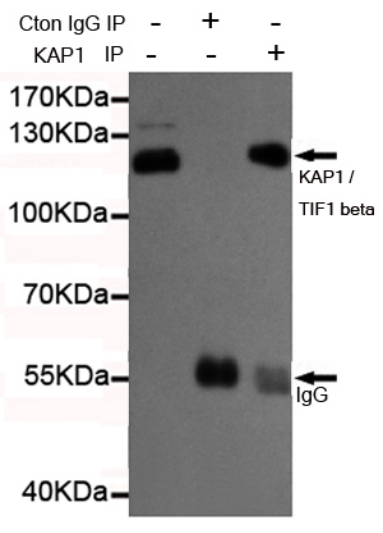
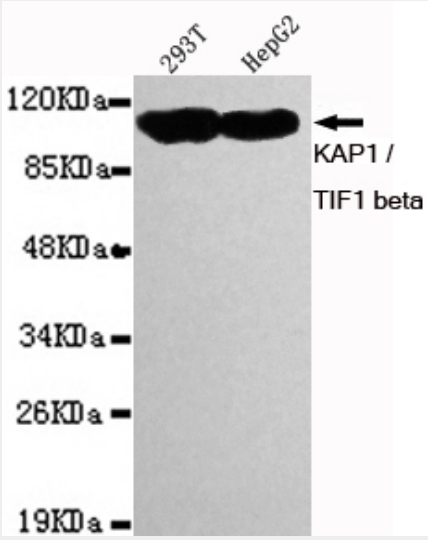
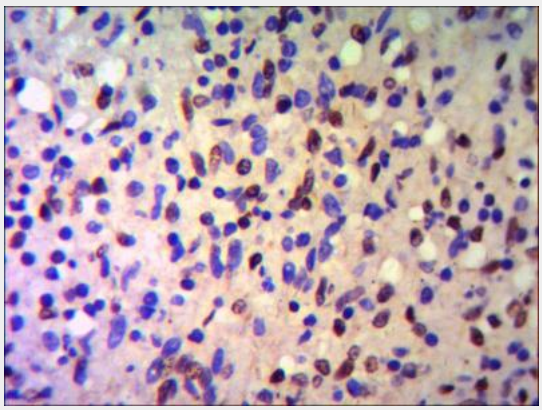


Immunoprecipitation analysis of Hela cell lysates using KAP1 / TIF1 beta mouse mAb.



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.

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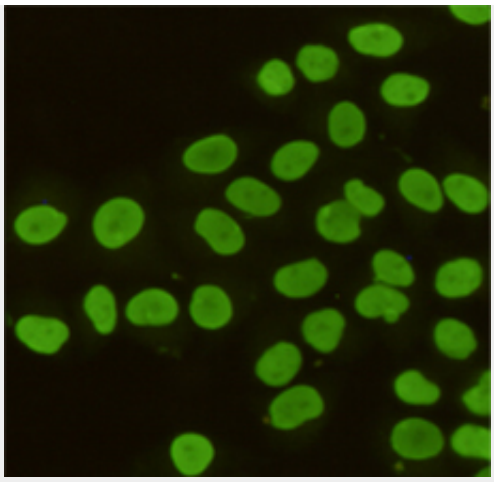

Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-KAP1 / TIF1 beta mouse mAb (dilution 1:100).

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.