

Product datasheet for TA385465S

OriGene Technologies, Inc.

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KAP1 (TRIM28) Rabbit Monoclonal Antibody [Clone ID: R07-5E6]

Product data:

Product Type: Primary Antibodies

Clone Name: R07-5E6

Applications: IF, IHC, WB

Recommended Dilution: WB: 1/1000

IHC: 1/50 ICC/IF: 1/50

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Monoclonal

Immunogen: A synthetic peptide of human KAP1

Formulation: 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA

Concentration: lot specific

Purification: Affinity Purified
Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Stability: 1 year

Predicted Protein Size: Calculated MW: 89 kDa; Observed MW: 100 kDa

Gene Name: tripartite motif containing 28

Database Link: Entrez Gene 10155 Human

Q13263





Background:

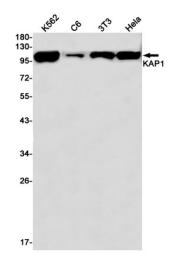
Swiss-Prot Acc.Q13263.Nuclear corepressor for KRAB domain-containing zinc finger proteins (KRAB-ZFPs). Mediates gene silencing by recruiting CHD3, a subunit of the nucleosome remodeling and deacetylation (NuRD) complex, and SETDB1 (which specifically methylates histone H3 at 'Lys-9' (H3K9me)) to the 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 PHDtype 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: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). Also required to maintain a transcriptionally repressive state of genes in undifferentiated embryonic stem cells (ESCs) (PubMed:24623306). 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). Acts as a corepressor for ZFP568.

Synonyms:

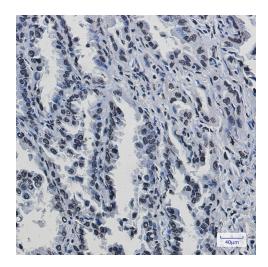
FLJ29029; KAP-1; KAP1; KRIP-1; RNF96; TF1B; TIF1-beta; TIF1B



Product images:

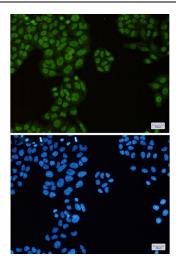


Western blot analysis of KAP1 in K562, C6, 3T3, Hela lysates using KAP1 antibody.



Immunohistochemistry analysis of paraffinembedded Human lung cancer using KAP1 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.





Immunocytochemistry analysis of KAP1(green) in Hela using KAP1 antibody,and DAPI(blue)