

Anti-Phospho-KAP1 (S824) Rabbit Monoclonal Antibody
Catalog # ABO15668**Specification****Anti-Phospho-KAP1 (S824) Rabbit Monoclonal Antibody - Product Information**

Application	WB, IP
Primary Accession	O13263
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

Description

Anti-Phospho-KAP1 (S824) Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human.

Anti-Phospho-KAP1 (S824) Rabbit Monoclonal Antibody - Additional Information

Gene ID 10155

Other Names

Transcription intermediary factor 1-beta, TIF1-beta, E3 SUMO-protein ligase TRIM28, 2.3.2.27, KRAB-associated protein 1, KAP-1, KRAB-interacting protein 1, KRIP-1, Nuclear corepressor KAP-1, RING finger protein 96, RING-type E3 ubiquitin transferase TIF1-beta, Tripartite motif-containing protein 28, TRIM28 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=16384), KAP1, RNF96, TIF1B

Calculated MW

100 kDa KDa

Application Details

WB 1:500-1:2000
IP 1:50

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human KAP1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Phospho-KAP1 (S824) Rabbit Monoclonal 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.

Anti-Phospho-KAP1 (S824) Rabbit Monoclonal 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](#)

Anti-Phospho-KAP1 (S824) Rabbit Monoclonal Antibody - Images

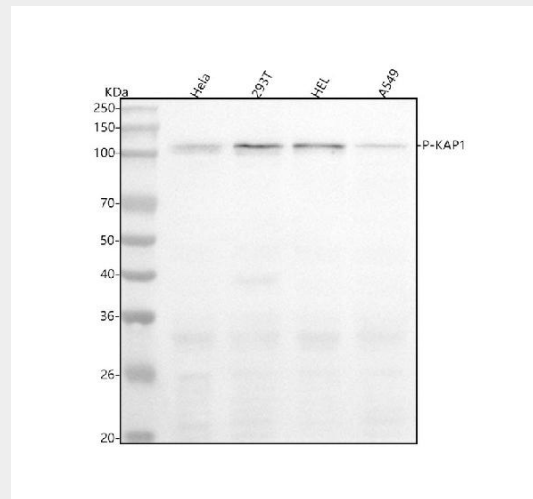


Figure 1. Western blot analysis of KAP1 using anti-KAP1 antibody (P00409).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: human HEL whole cell lysates,

Lane 4: human A549 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-KAP1 antigen affinity purified monoclonal antibody (Catalog # P00409) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for KAP1 at approximately 100 kDa. The expected band size for KAP1 is at 89 kDa.