

Anti-KAP1 (phospho S824) antibody ab84077

2 References 2 图像

概述

产品名称	Anti-KAP1 (phospho S824)抗体
描述	兔多克隆抗体to KAP1 (phospho S824)
宿主	Rabbit
经测试应用	适用于: ICC/IF
种属反应性	与反应: Human 预测可用于: Chimpanzee, Rhesus monkey, Gorilla, Orangutan 
免疫原	Synthetic peptide corresponding to Human KAP1 (phospho S824).
阳性对照	Neocarzinostatin treated asynchronous HeLa cells. Untreated asynchronous HeLa cells.
常规说明	Concentration is optimized for IHC and not determined  The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.  If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

## The Abpromise guarantee

**Abpromise™** 承诺保证使用ab84077于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		

### 应用说明

ICC/IF: 1/100 - 1/500. Permeabilization with Triton-X 100 is recommended.

Likely to work with frozen sections.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

## 靶标

### 功能

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 PHD-type zinc finger.

### 组织特异性

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

### 通路

Protein modification; protein sumoylation.

### 序列相似性

Belongs to the TRIM/RBCC family.  
Contains 2 B box-type zinc fingers.  
Contains 1 bromo domain.  
Contains 1 PHD-type zinc finger.  
Contains 1 RING-type zinc finger.

### 结构域

The HP1 box is both necessary and sufficient for HP1 binding.  
The PHD-type zinc finger enhances CEBPB transcriptional activity. The PHD-type zinc finger, the HP1 box and the bromo domain, function together to assemble the machinery required for repression of KRAB domain-containing proteins. Acts as an intramolecular SUMO E3 ligase for autosumoylation of bromodomain.  
The RING-finger-B Box-coiled-coil/tripartite motif (RBCC/TRIM motif) is required for interaction with the KRAB domain of KRAB-zinc finger proteins. Binds four zinc ions per molecule. The RING finger and the N-terminal of the leucine zipper alpha helical coiled-coil region of RBCC are required for oligomerization.  
Contains one Pro-Xaa-Val-Xaa-Leu (PxVxL) motif, which is required for interaction with chromoshadow domains. This motif requires additional residues -7, -6, +4 and +5 of the central Val which contact the chromoshadow domain.

## 翻译后修饰

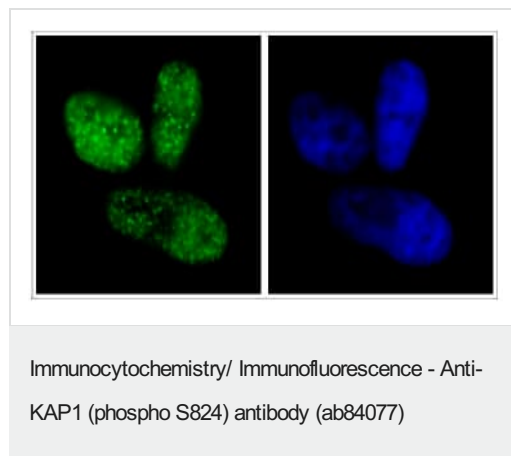
Phosphorylated upon DNA damage, probably by ATM or ATR. ATM-induced phosphorylation on Ser-824 represses sumoylation leading to the de-repression of expression of a subset of genes involved in cell cycle control and apoptosis in response to genotoxic stress. Dephosphorylation by the phosphatases, PPP1CA and PP1CB forms, allows sumoylation and expression of TRIM28 target genes.

Sumoylation/desumoylation events regulate TRIM28-mediated transcriptional repression. Sumoylation is required for interaction with CHD3 and SETDB1 and the corepressor activity. Represses and is repressed by Ser-824 phosphorylation. Enhances the TRIM28 corepressor activity, inhibiting transcriptional activity of a number of genes including GADD45A and CDKN1A/p21. Lys-554, Lys-779 and Lys-804 are the major sites of sumoylation. In response to Dox-induced DNA damage, enhanced phosphorylation on Ser-824 prevents sumoylation and allows de-repression of CDKN1A/p21.

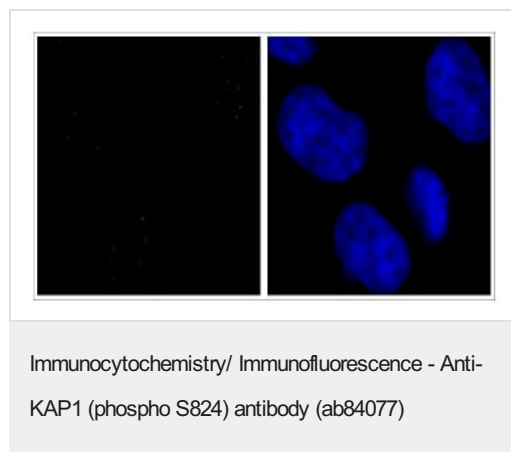
## 细胞定位

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

## 图片



ab84077 at 1/250 dilution staining KIP1 in Neocarzinostatin treated asynchronous HeLa cells by Immunocytochemistry / Immunofluorescence. A FITC conjugated anti rabbit used at a dilution of 1/100 as secondary.



Detection of Human Phospho KAP1 (S824) by Immunocytochemistry.

Samples: Untreated asynchronous HeLa cells (formaldehyde fixation).

Antibody: ab84077 used at a dilution of 1/250.

Detection: Anti-rabbit IgG-FITC conjugated used at a dilution of 1/100.

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