


Anti-KAP1 (phospho S824) antibody ab70369

★★★★★ [6 Abreviews](#) [58 References](#) [画像数 7](#)

製品の概要

製品名	Anti-KAP1 (phospho S824) antibody
製品の詳細	Rabbit polyclonal to KAP1 (phospho S824)
由来種	Rabbit
アプリケーション	適用あり: ICC, WB, IHC-P, IP
種交差性	交差種: Human 交差が予測される動物種: Chimpanzee, Rhesus monkey, Gorilla, Orangutan 
免疫原	Synthetic peptide corresponding to Human KAP1 (phospho S824). Database link: Q13263
特記事項	<p>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.</p> <p>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</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee

Abpromise保証は、 次のテスト済みアプリケーションにおけるab70369の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
ICC	★★★★★ (1)	Use at an assay dependent concentration.
WB	★★★★★ (2)	1/1000 - 1/5000. Detects a band of approximately 117 kDa (predicted molecular weight: 89 kDa).
IHC-P		Use a concentration of 0.2 µg/ml.
IP		Use at 2-5 µg/mg of lysate.

ターゲット情報

機能	<p>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.</p>
組織特異性	<p>Expressed in all tissues tested including spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes.</p>
パスウェイ	<p>Protein modification; protein sumoylation.</p>
配列類似性	<p>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.</p>
ドメイン	<p>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.</p>
翻訳後修飾	<p>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</p>

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.

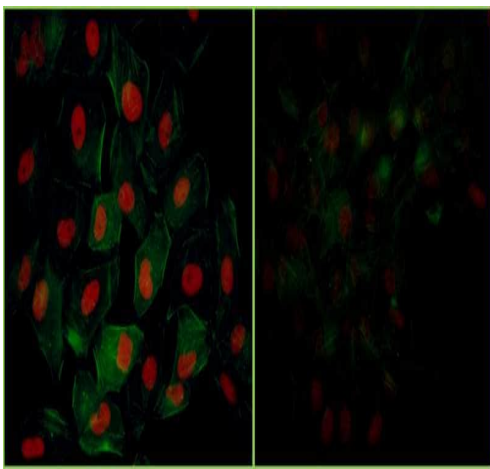
Sumoylation is required for interaction with CHD3 and SETDB1 and the corepressor activity.

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.

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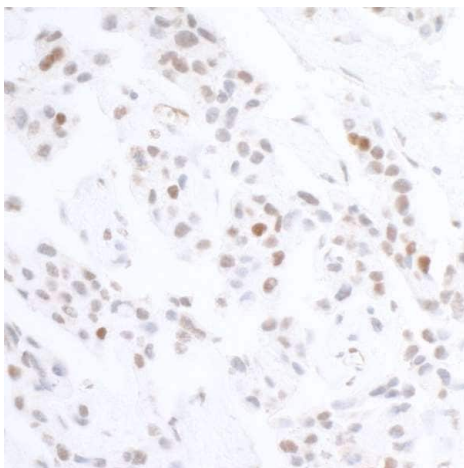
Nucleus. Associated with centromeric heterochromatin during cell differentiation through CBX1.

画像



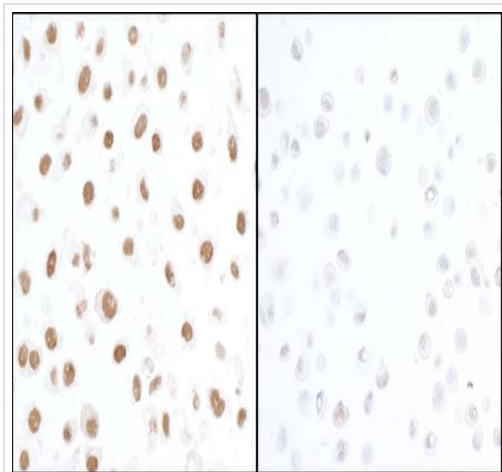
Detection of KAP1 (phospho S824) by ab70369 (1:200) in NBF-fixed HeLa cells by Immunocytochemistry. Cells were treated with etoposide (left) and untreated (right). Red fluorescent anti-rabbit IgG dylight 594 conjugated was used as a secondary antibody at 1/100 dilution.

Immunocytochemistry - Anti-KAP1 (phospho S824) antibody (ab70369)



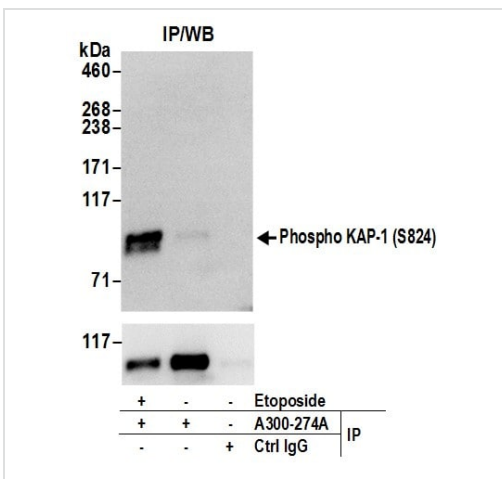
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung cancer cells labelling KAP1 with ab70369 at 0.2 µg/mL.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KAP1 (phospho S824) antibody (ab70369)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KAP1 (phospho S824) antibody (ab70369)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of HeLa cells labelling KAP1 with ab70369 at 0.2 µg/mL. Cells were treated with etoposide (left) and untreated (right).

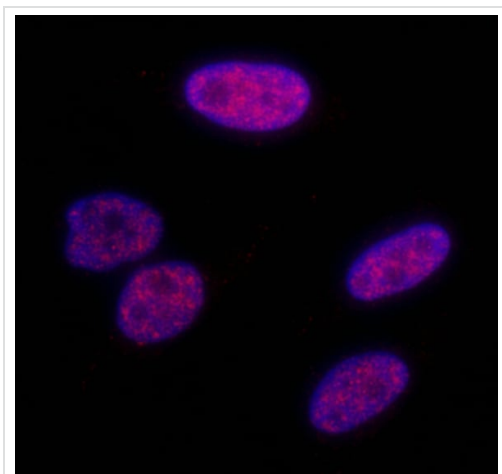


Immunoprecipitation - Anti-KAP1 (phospho S824) antibody (ab70369)

Detection of Human KAP1 (phospho S824) by Western Blot of Immunoprecipitates.

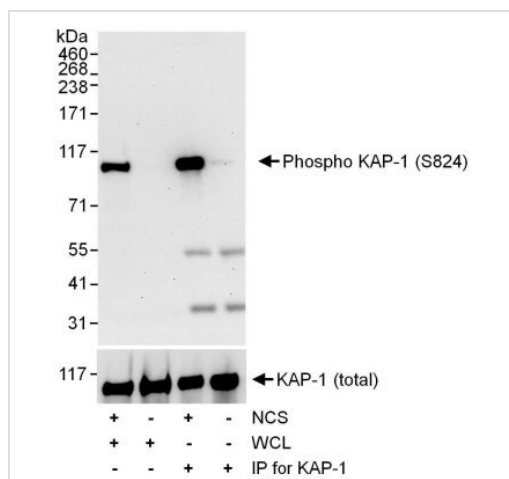
Samples: Whole cell lysate (1 mg for IP; 20% of IP loaded) from 293T cells that were mock treated (-) or treated with Etoposide (100 µM, 2h).

Detection: Chemiluminescence with an exposure time of 30 seconds.



Immunocytochemistry - Anti-KAP1 (phospho S824) antibody (ab70369)

Detection of KAP1 (phospho S824) by ab70369 (1:200) in NBF-fixed HeLa cells by Immunocytochemistry.



Western blot - Anti-KAP1 (phospho S824) antibody (ab70369)

All lanes : Anti-KAP1 (phospho S824) antibody (ab70369) at 0.1 µg/ml

Lane 1 : Whole cell lysate from asynchronous HeLa cells, treated with neocarzinostatin (NCS; 200 ng/ml, 30 minutes) at 50 µg

Lane 2 : Whole cell lysate from asynchronous HeLa cells at 50 µg

Lane 3 : Whole cell lysate from asynchronous HeLa cells, treated with neocarzinostatin (NCS; 200 ng/ml, 30 minutes) at 200 µg

Lane 4 : Whole cell lysate from asynchronous HeLa cells at 200 µg

Developed using the ECL technique.

Predicted band size: 89 kDa

Observed band size: 117 kDa



Immunocytochemistry - Anti-KAP1 (phospho S824) antibody (ab70369)

This image is courtesy of an Abreview submitted by Ms. Can Zhou

ab70369 staining KAP1 (phospho S824) (red) in Human U2OS cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were treated with 1 µM Etoposide for 3 hours prior to fixing. Cells were fixed with formaldehyde, permeabilized in 0.5% NP40 and blocked with 3% BSA for 2 hours at 21°C. Samples were incubated with primary antibody (1/1000 in PBS + 3% BSA) for 12 hours at 4°C. An Alexa Fluor®594-conjugated Mouse anti-rabbit IgG monoclonal (1/500) was used as the secondary antibody.

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