Product Datasheet

KAP1 [p Ser824] Antibody NB100-2350

Unit Size: 0.1 ml

Store at 4C. Do not freeze.



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NB100-2350

KAP1 [p Ser824] Antibody

Product Information		
Unit Size	0.1 ml	
Concentration	0.2 mg/ml	
Storage	Store at 4C. Do not freeze.	
Clonality	Polyclonal	
Preservative	0.09% Sodium Azide	
Isotype	lgG	
Purity	Immunogen affinity purified	
Buffer	TBS, 0.1% BSA	
Product Description		
Description	This antibody can be used as the primary antibody in a PLA assay with the following as complementing antibodies:NB100-322, NB500-158, NB100-41429	
Host	Rabbit	
Gene ID	10155	
Gene Symbol	TRIM28	
Species	Human, Mouse, Rat	
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 24248351). Rat reactivity reported in scientific literature (PMID: 27895165).	
Immunogen	This KAP1 [p Ser824] Antibody was developed against mmunogen a synthetic phosphorylated peptide, which represents a portion of human KRAB-Associated Protein 1 surrounding Serine 824 according to the numbering given in entry NP_005753.1 (GeneID 10155).	
Notes	This antibody can be used as the primary antibody in a PLA assay with the following as complementing antibodies:NB100-322, NB500-158, NB100-41429	
Product Application Details		
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Chromatin Immunoprecipitation (ChIP)	
Recommended Dilutions	Western Blot 1:2000 - 1:10000, Immunohistochemistry 1:500 - 1:2000, Immunocytochemistry/ Immunofluorescence 1:200 - 1:1000, Immunoprecipitation 2-10 ug/mg lysate, Immunohistochemistry-Paraffin 1:500 - 1:2000, Chromatin Immunoprecipitation (ChIP)	
Application Notes	Use in Chromatin Immunoprecipitation reported in scientific literature (PMID:35031618) Epitope retrieval with citrate buffer pH 6.0 is recommended for FFPE tissue sections. KAP1 [p Ser824] antibody validated for WB from a verified customer review.	





Western Blot: KAP1 [p Ser824] Antibody [NB100-2350] - MDA-MB-231 MDA-MB-231 cells cells were treated with DMSO or Merbarone (100 uM) for 24 hours, DMSO Merbarone whole cell lysates were loaded with 50 ug/lane. 10% SDS-PAGE. KAP1 [p Ser824] Antibody (NB100-2350) primary antibody at 1:1000, 4C, 170 130 overnight. Western blot image submitted by a verified customer review. -pSer824-KAP1 100 70 25 Immunocytochemistry/Immunofluorescence: KAP1 [p Ser824] Antibody [NB100-2350] - NBF-fixed asynchronous HeLa cells grown in chambered microscope slides and treated with EPE (left) or untreated (right). Antibody: Affinity purified rabbit anti-Phospho KAP-1 (S824) used at a dilution of 1:200 (1ug/ml). Detection: Red fluorescent Anti-rabbit IgG-DyLight (R) 594 conjugated used at a dilution of 1:100. Immunohistochemistry-Paraffin: KAP1 [p Ser824] Antibody [NB100-2350] - Human Phospho Kap1 (S824) by Immunohistochemistry. Sample: FFPE serial section of human lung cancer used at a dilution of 1:200 (1 ug/ml). Detection: DAB Western Blot: KAP1 [p Ser824] Antibody [NB100-2350] - Samples: kDa 460-Whole cell lysate (15 ug) from NIH 3T3 cells treated with 100 uM 268etoposide (+) or mock treated (-). Antibodies: Affinity purified rabbit anti-Phospho KAP-1 (S824) antibody used for WB at 0.04 ug/ml. Detection: 171-Chemiluminescence with an exposure time of 30 seconds. Lower panel 117 + phospho KAP-1 (S824) shows western blot for total KAP-1 using rabbit anti-KAP-1 recombinant monoclonal antibody at 1:1000. 71-55-41 - Total KAP-1 Etoposide Treatment

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Western Blot: KAP1 [p Ser824] Antibody [NB100-2350] - Samples: Whole cell lysate (50 ug) from HEK293T cells treated with 100 uM etoposide (+) or mock treated (-). Antibodies: Affinity purified rabbit anti- Phospho KAP-1 (S824) antibody used for WB at 0.04 ug/ml. Detection: Chemiluminescence with an exposure time of 1 second. Lower panel shows western blot for total KAP-1 using affinity purified rabbit anti KAP- 1 antibody at 0.1 ug/ml.	KDa 460- 268- 171- 117- ↑ phospho KAP-1 (S824) 71- 55- 41- 117- ↓ Total KAP-1 ↓ Etoposide Treatment
Immunohistochemistry-Paraffin: KAP1 [p Ser824] Antibody [NB100- 2350] - FFPE serial sections of asynchronous HeLa cells treated with EPE (left) and untreated HeLa cells (right). Antibody: Affinity purified rabbit anti-Phospho KAP-1 (S824) used at a dilution of 1:200 (1ug/ml). Detection: DAB	
Immunoprecipitation: KAP1 [p Ser824] Antibody [NB100-2350] - Samples: Whole cell lysate (1 mg for IP; 20% of IP loaded) from HEK293T cells treated with 100 uM etoposide (+) or mock treated (-). Antibodies: Rabbit anti-Phospho KAP-1 (S824) and rabbit anti-KAP-1 recombinant monoclonal antibody used for IP at 6 ug/mg lysate. For blotting immunoprecipitated Phospho KAP-1 (S824), Antibody was used at 0.04 ug/ml. To examine total KAP-1, the blot was stripped and then blotted with this antibody at 1:1000 (lower panel). Detection: Chemiluminescence with an exposure time of 1 second. Previous	IP/WB 460- 268 171- 117- 55- 41- 117- * * * * * * * * * * * * * * * * * * * * * *
Western Blot: KAP1 [p Ser824] Antibody [NB100-2350] - MAGE I regulates KAP1 gene binding, trimethylation of histone 3 on lysine 9, & gene repression in HEK293T cells.MAGE I expression decreases binding of KAP1, H3me3K9, & repression of the ID1 tumor suppressor gene (A, B, D). In contrast, MAGE I expression increases binding of KAP1, H3me3K9, & repression of mRNA & protein levels of the Ki67 gene (E, F, H, I, J, L). Note MAGE I binds to Ki67 gene sites but not ID1 gene sites (C, G, K). "M" denotes Mock transfection control. "A3" & "C2" denote MAGE-A3 & MAGE-C2, respectively. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/21876767), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	M A3 C2



G



Western Blot: KAP1 [p Ser824] Antibody [NB100-2350] - Truncated G PPM1D impairs DNA damage response in mouse thymus. Expression of PPM1D mRNA analyzed by RT-qPCR in thymi of Ppm1d+/+, Ppm1dT/+ & Ppm1dT/T mice & normalized to GAPDH (n = 3) (A). Thymi from mice of indicated genotypes lysed & proteins separated by SDS-PAGE. Samples probed w/ antibody against PPM1D & importin- β as a loading control. The empty & full arrowheads indicate the position of full-length & the C-terminally truncated PPM1D, respectively. (B). Cells from thymi from Ppm1d+/+ & Ppm1dT/+ mice analyzed by flow cytometry. Plotted are the counts of indicated populations as follows: double-negative Tcells (DN & DN1, DN2, DN3, DN4), double-positive T-cells (DP), CD8positive T-cells (CD8+) & CD4-positive T-cells (CD4+) (n = 3) (C). The median size of thymus determined in Ppm1d +/+ (n = 11) & Ppm1dT/+ (n= 12) mice (D). A scheme of experimental setup in F-I. Mice exposed or not to a low dose of IR (3 Gy), sacrificed after 6 h & thymi & lymph nodes 1751 collected (E). Proteins isolated from thymi from mice of indicated genotypes exposed to mock or to IR probed w/ indicated antibodies by immunoblotting (F). Proteins isolated from inguinal lymph nodes from mice of indicated genotypes exposed to mock or to IR probed w/ indicated antibodies by immunoblotting (G). RNA isolated from thymi from mice in E analyzed by RT-qPCR. Expression of CDKN1Ap21 mRNA normalized to GAPDH. Statistical significance evaluated by twotailed t-test, error bars indicate SD, n = 5 (H). RNA isolated from thymi from mice in D analyzed by RT-qPCR. Expression of PUMA mRNA normalized to GAPDH. Statistical significance evaluated by two-tailed ttest, error bars indicate SD, n = 5. * p < 0.05; *** p < 0.0005; **** p < 0.0001 (I). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32927737), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Western Blot: KAP1 [p Ser824] Antibody [NB100-2350] - Truncated PPM1D impairs DNA damage response in mouse thymus. Expression of PPM1D mRNA analyzed by RT-qPCR in thymi of Ppm1d+/+, Ppm1dT/+ & Ppm1dT/T mice & normalized to GAPDH (n = 3) (A). Thymi from mice of indicated genotypes lysed & proteins separated by SDS-PAGE. Samples probed w/ antibody against PPM1D & importin- β as a loading control. The empty & full arrowheads indicate the position of full-length & the C-terminally truncated PPM1D, respectively. (B). Cells from thymi from Ppm1d+/+ & Ppm1dT/+ mice analyzed by flow cytometry. Plotted are the counts of indicated populations as follows: double-negative Tcells (DN & DN1, DN2, DN3, DN4), double-positive T-cells (DP), CD8positive T-cells (CD8+) & CD4-positive T-cells (CD4+) (n = 3) (C). The median size of thymus determined in Ppm1d +/+ (n = 11) & Ppm1dT/+ (n= 12) mice (D). A scheme of experimental setup in F-I. Mice exposed or not to a low dose of IR (3 Gy), sacrificed after 6 h & thymi & lymph nodes collected (E). Proteins isolated from thymi from mice of indicated genotypes exposed to mock or to IR probed w/ indicated antibodies by immunoblotting (F). Proteins isolated from inguinal lymph nodes from mice of indicated genotypes exposed to mock or to IR probed w/ indicated antibodies by immunoblotting (G). RNA isolated from thymi from mice in E analyzed by RT-qPCR. Expression of CDKN1Ap21 mRNA normalized to GAPDH. Statistical significance evaluated by twotailed t-test, error bars indicate SD, n = 5 (H). RNA isolated from thymi from mice in D analyzed by RT-qPCR. Expression of PUMA mRNA normalized to GAPDH. Statistical significance evaluated by two-tailed ttest, error bars indicate SD, n = 5. * p <0.05; *** p < 0.0005; **** p < 0.0001 (I). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32927737), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

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Publications

Nicole Kiweler, Helena Schwarz, Alexandra Nguyen, Stephanie Matschos, Christina Mullins, Andrea Piée-Staffa, Christina Brachetti, Wynand P. Roos, Günter Schneider, Michael Linnebacher, Walburgis Brenner, Oliver H. Krämer The epigenetic modifier HDAC2 and the checkpoint kinase ATM determine the responses of microsatellite instable colorectal cancer cells to 5-fluorouracil Cell Biology and Toxicology 2022-05-24 [PMID: 35608750]

Alexandra Nguyen, Al-Hassan M. Mustafa, Alessa K. Leydecker, Melisa Halilovic, Janine Murr, Falk Butter, Oliver H. Krämer The protein phosphatase-2A subunit PR130 is involved in the formation of cytotoxic protein aggregates in pancreatic ductal adenocarcinoma cells Cell Communication and Signaling : CCS 2024-04-03 [PMID: 38570831]

Nguyen A, Dzulko M, Murr J et al. Class 1 Histone Deacetylases and Ataxia-Telangiectasia Mutated Kinase Control the Survival of Murine Pancreatic Cancer Cells upon dNTP Depletion Cells 2021-09-23 [PMID: 34685500] (Western Blot)

Martinikova AS The role of truncated PPM1D/Wip1 phosphatase in cancer Thesis 2022-01-01 (Western Blot, Mouse)

Nayler S, Gatei M, Kozlov S et al. Embryonic Stem Cells/Induced Pluripotent Stem (iPS) Cells: Induced Pluripotent Stem Cells from Ataxia-Telangiectasia Recapitulate the Cellular Phenotype Stem Cells Transl Med 2012-12-01 [PMID: 23197857]

Yang Y, Lu H, Chen C et al. HIF-1 Interacts with TRIM28 and DNA-PK to release paused RNA polymerase II and activate target gene transcription in response to hypoxia Nature communications 2022-01-14 [PMID: 35031618] (Chemotaxis, WB)

lida K, Abdelhamid Ahmed AH, Nagatsuma AK et al. Identification and Therapeutic Targeting of GPR20, Selectively Expressed in Gastrointestinal Stromal Tumors, with DS-6157a, a First-in-Class Antibody-Drug Conjugate Cancer discovery 2021-02-12 [PMID: 33579785]

Martinikova AS, Burocziova M, Stoyanov M, Macurek L Truncated PPM1D Prevents Apoptosis in the Murine Thymus and Promotes Ionizing Radiation-Induced Lymphoma Cells 2020-09-10 [PMID: 32927737] (WB, Mouse)

Quek H, Luff J, Cheung K et al. Rats with a missense mutation in Atm display neuroinflammation and neurodegeneration subsequent to accumulation of cytosolic DNA following unrepaired DNA damage. J. Leukoc. Biol. 2016-11-28 [PMID: 27895165] (Rat)

Hartlerode AJ, Morgan MJ, Wu Y et al. Recruitment and activation of the ATM kinase in the absence of DNA-damage sensors. Nat. Struct. Mol. Biol. 2015-08-17 [PMID: 26280532] (WB, Mouse)

Kijas AW, Lim YC, Bolderson E et al. ATM-dependent phosphorylation of MRE11 controls extent of resection during homology directed repair by signalling through Exonuclease 1. Nucleic Acids Res. 2015-08-03 [PMID: 26240375] (WB, Human)

Puccini J, Shalini S, Voss AK et al. Loss of caspase-2 augments lymphomagenesis and enhances genomic instability in Atm-deficient mice. Proc Natl Acad Sci U S A 2013-12-03 [PMID: 24248351] (WB, Mouse)

More publications at <u>http://www.novusbio.com/NB100-2350</u>





Novus Biologicals USA

10730 E. Briarwood Avenue Centennial, CO 80112 USA Phone: 303.730.1950 Toll Free: 1.888.506.6887 Fax: 303.730.1966 nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave Toronto, ON M8Z 4E6 Canada Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402 canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449 Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com Technical Support: nb-technical@biotechne.com Orders: nb-customerservice@bio-techne.com General: novus@novusbio.com

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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
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NBP2-22889	Recombinant Human KAP1 His Protein

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