OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA309918

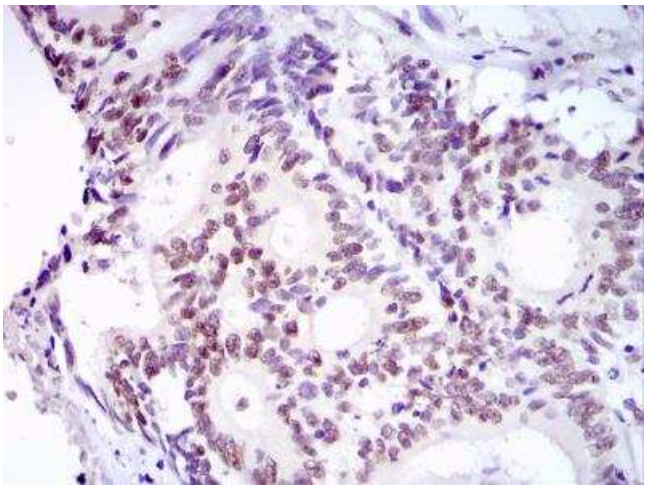
53BP1 (TP53BP1) Rabbit Polyclonal Antibody

Product data:

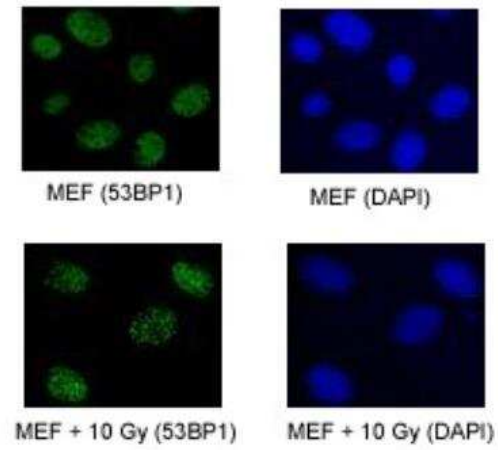
Product Type:	Primary Antibodies
Applications:	ChIP, FC, ICC/IF, IHC, Immunoblotting, IP, WB
Recommended Dilution:	Chromatin Immunoprecipitation (ChIP), Flow (Intracellular): 1.5 ug/ml, Knockdown Validated, In-situ Hybridization, Immunohistochemistry-Paraffin: 1:1000-1:5000, Immunohistochemistry, Immunoprecipitation, Chromatin Immunoprecipitation, Knockout Validated, Immunoblotting, Immunohistochemistry-Frozen, Flow Cytometry: 1.5 ug/ml, Immunocytochemistry/ Immunofluorescence: 1:1000-1:5000, Western Blot: 1 - 2 ug/ml
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The epitope recognized by this antibody maps to a region between residues 350 and 400 of human 53BP1 [NP_005648.1 (GeneID 7158)].
Formulation:	Tris-citrate/phosphate buffer, pH 7 to 8 and 0.09% Sodium Azide
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	tumor protein p53 binding protein 1
Database Link:	NP_005648 Entrez Gene 7158 Human Q12888
Synonyms:	53BP1; p202
Protein Families:	Druggable Genome, Transcription Factors

View online »

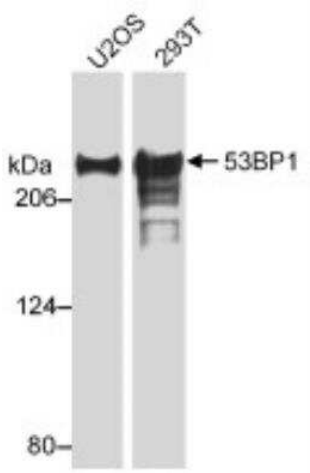
Product images:



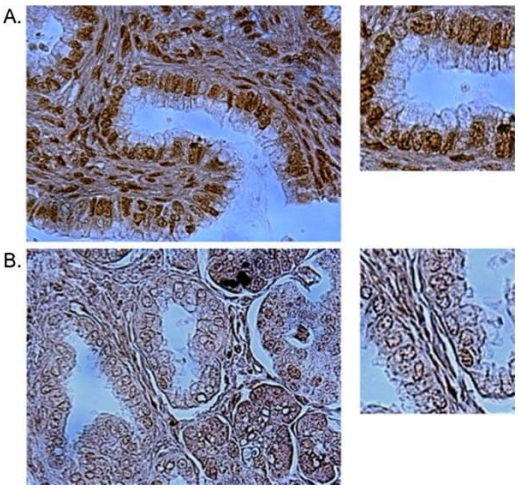
Staining of 53BP1 in human colon cancer using DAB with hematoxylin counterstain.



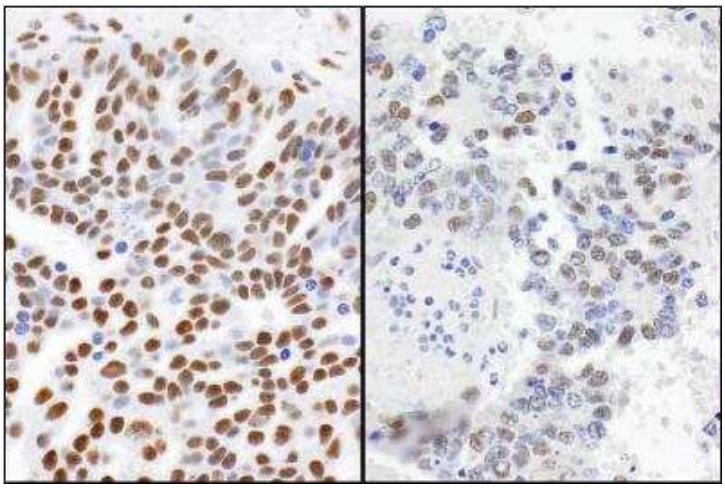
Upper Panel: 53BP1 foci in proliferating MEFs. Lower Panel: 53BP1 foci in proliferating MEFs exposed to 10 Gy of IR.



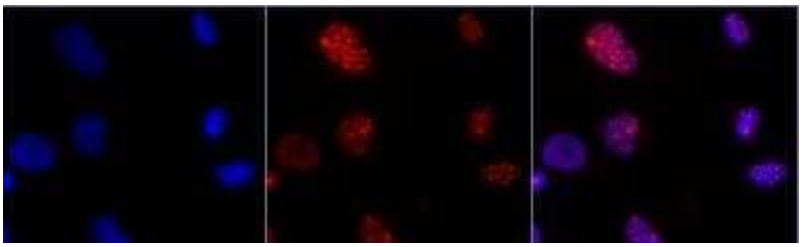
Whole cell lysate from U2OS or 293T cells. Bands indicate an observed molecular weight of ~220 kDa and the theoretical molecular weight is 214 kDa.



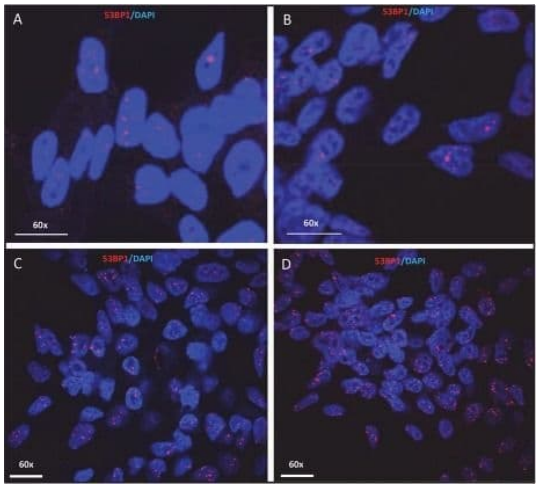
Representative immunohistochemistry staining for 53BP1 expression in pancreatic adenocarcinoma. (A) is high intensity of 53BP1 expression and (B) is low intensity of 53BP1 expression.



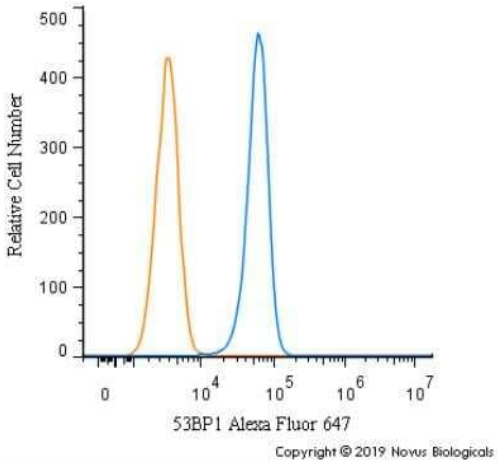
Detection of Human and Mouse 53BP1 by IHC. Sample: FFPE sections of human ovarian carcinoma (left) and mouse teratoma (right). Antibody: 53BP1 Antibody (Catalog #TA309918) used at a dilution of 1:1000 (1ug/mL). Detection: DAB.



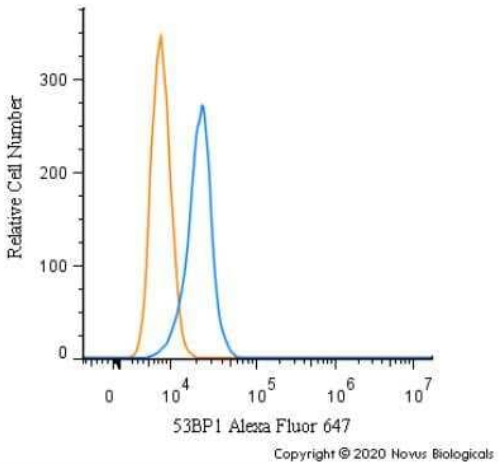
HeLa cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.5% Triton X-100 in PBS for 5 minutes. The cells were incubated with 53BP1 Antibody conjugated to DyLight 550 (TA309918R) at 5 ug/ml for 1 hour at room temperature. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



LNCaP cells in culture were treated for 24 hrs with DMSO or ENZ, then irradiated with 0 or 1 Gy.Cell were fixed and immunostained for 53BP1 0.5, 1.5 and 24 hrs after irradiation. Immunofluorescent images were obtained by confocal microscopy. White bar = 20 microns. A) DMSO alone, B) ENZ alone, C) 1 Gy, D) ENZ + 1 Gy. White bar = 20 microns.

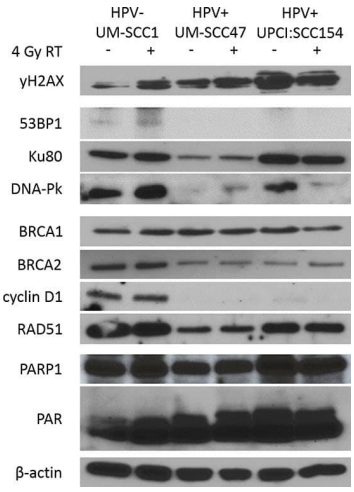


An intracellular stain was performed on RH-30 cells with 53BP1 Antibody (Catalog #TA309918AF647) (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 647.

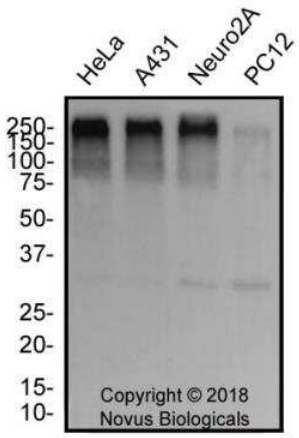


An intracellular stain was performed on A431 cells with 53BP1 Antibody (Catalog #TA309918AF647) (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 647.

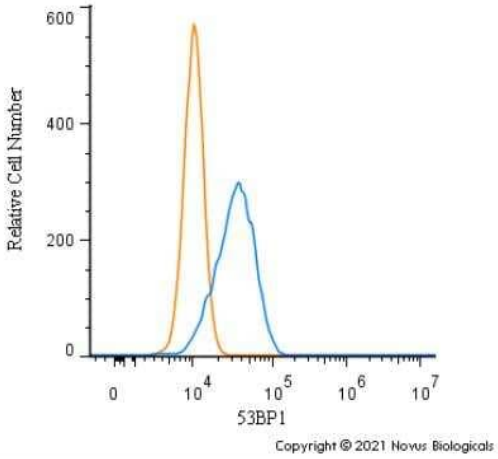
HeLa cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.5% Triton X-100 in PBS for 5 minutes. The cells were incubated with 53PB1 Antibody conjugated to DyLight 550 (TA309918R) at 5 ug/ml for 1 hour at room temperature. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



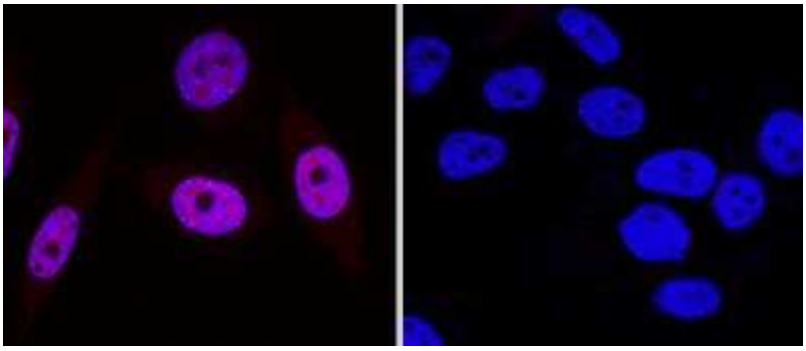
HPV+ HNSCCs have decreased expression of NHEJ and HR proteins including DNA-Pk and BRCA2Cells were treated with mock or 4 Gy radiation, harvested and lysed at 15 minutes post-treatment, and analyzed by western blot for relative expression of indicated proteins. β-actin was used as a loading control. Shown is a representative blot from 2 independent experiments.



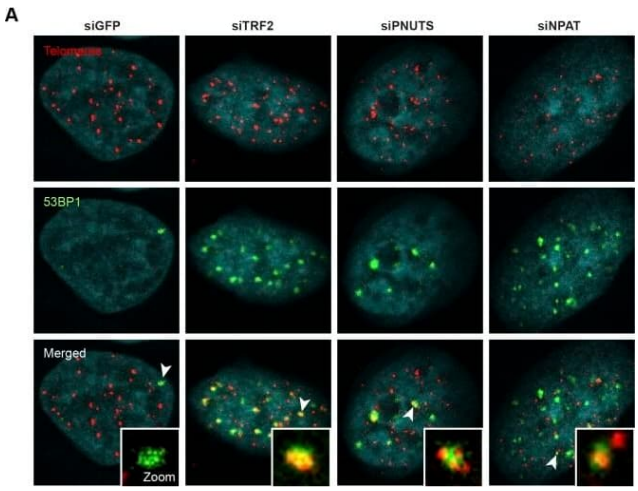
Total protein from HeLa, A431, Neuro2A, and PC12 was separated on a 12% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 1.0 ug/mL in 5% block buffer and detected with an anti-rabbit HRP secondary antibody using chemiluminescence. The observed molecular weight for these samples are ~250 kDa and the theoretical molecular weight is 214 kDa.



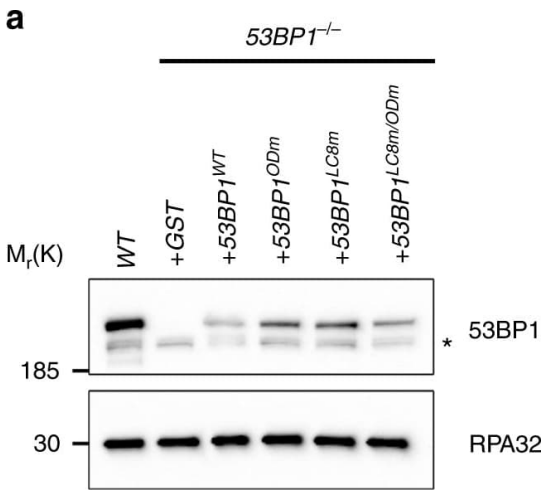
An intracellular stain was performed on Ntera2 cells with 53BP1 Antibody TA309918 (blue) and a matched isotype control NBP2-24891 (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1.0 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (SA5-10033, Thermo Fisher).



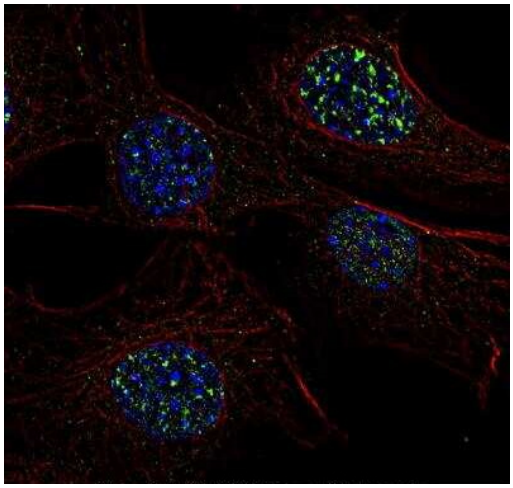
53BP1 was detected in immersion fixed HeLa cells (left) but was not detected in 53BP1 knockout Hela cells (right) using Rabbit Anti-human 53BP1 polyclonal antibody (Catalog #TA309918) at 0.3 ug/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to nuclei.



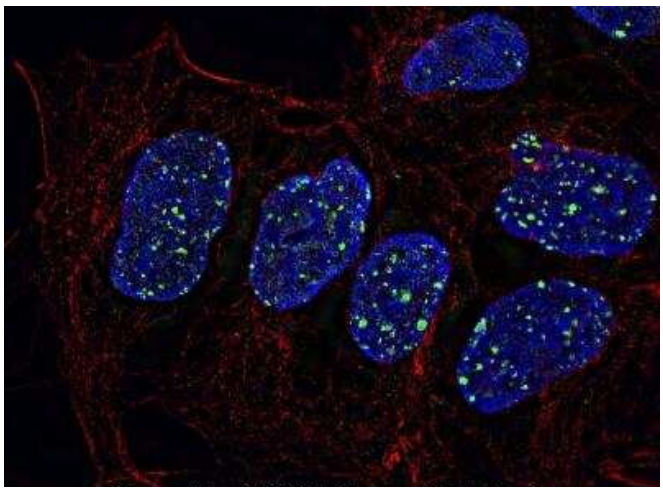
Depletion of PNUTS and NPAT induces a global DDR.(A) Induction of telomere dysfunction–induced foci (TIF) upon candidate knockdown in HeLa cells from Fig 5. Depletion of TRF2 was used as a positive control. 53BP1 was detected by indirect IF and telomeres by FISH with a Cy3-[CCCTAA]3 probe. (B) Frequency distribution of the number of TIFs per cell from (A). n indicates the number of cells analyzed for each condition and red lines mark the mean.



DYNLL1 is required for 53BP1-dependent p53 responses to Nutlin-3. a Immunoblot analysis of the MCF-7 cell lines used in (a) with anti-53BP1 or anti-RPA32 antibodies prior to N3 treatment. b Quantification of n = 3 independent experiments represented in (a), each performed in triplicate. Mean ± SD. c Indicated parental or stably complemented 53BP1-/- MCF-7 cell lines were incubated in the presence (11 days) or absence (7 days) of Nutlin-3 (4 μM)



NIH3T3 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.5% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-53BP1 Antibody TA309918 at 2 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:1000 dilution for 60 minutes. Alpha tubulin (DM1A) NB100-690 was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse Dylight 550 (Red) at a 1:1000 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.



Ntera2 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.5% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-53BP1 Antibody TA309918 at 2 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:1000 dilution for 60 minutes. Alpha tubulin (DM1A) NB100-690 was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse Dylight 550 (Red) at a 1:1000 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.