

# Product Datasheet

## Rad50 Antibody (13B3) - Azide and BSA Free NB100-147-0.1ml

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Updated 2/21/2025 v.20.1

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**NB100-147-0.1ml**

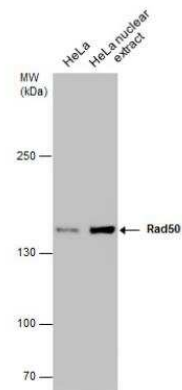
Rad50 Antibody (13B3) - Azide and BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	13B3
Preservative	No Preservative
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	153 kDa
Product Description	
Host	Mouse
Gene ID	10111
Gene Symbol	RAD50
Species	Human, Mouse, Rat, Monkey
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Specificity/Sensitivity	This is specific for Rad50.
Immunogen	Amino acids 1-425 of Rad50 expressed in E. coli.
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, In vitro assay, Immunoprecipitation, Knockdown Validated
Recommended Dilutions	Western Blot 1:500-1:3000, Immunohistochemistry 1:100 - 1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunoprecipitation, Immunohistochemistry-Paraffin 1:100-1:1000, In vitro assay, Knockdown Validated
Application Notes	IHC usage reported in scientific literature (PMID: 16431910). in vitro Assay dependent, IP Assay dependent. Rad50 antibody validated for WB from a verified customer review.

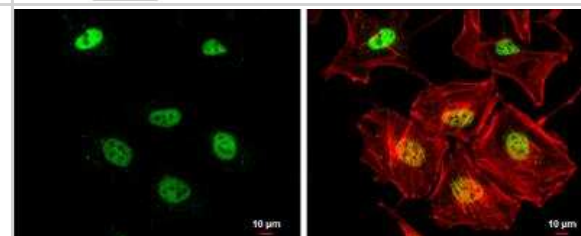


## Images

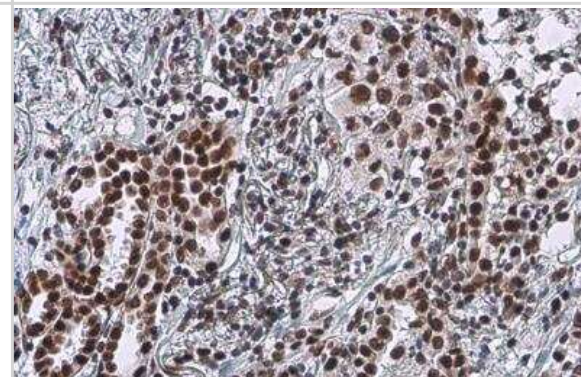
Western Blot: Rad50 Antibody (13B3) [NB100-147] - HeLa whole cell and nuclear extracts (30 ug) were separated by 5% SDS-PAGE, and the membrane was blotted with Rad50 antibody [N1N2], N-term diluted at 1:500.



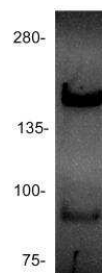
Immunocytochemistry/Immunofluorescence: Rad50 Antibody (13B3) [NB100-147] - HeLa cells were fixed in 4% paraformaldehyde at RT for 15 min. Green: Rad50 protein stained by Rad50 antibody [13B3] diluted at 1:200. Red: phalloidin, a cytoskeleton marker, diluted at 1:200. Scale bar = 10um.



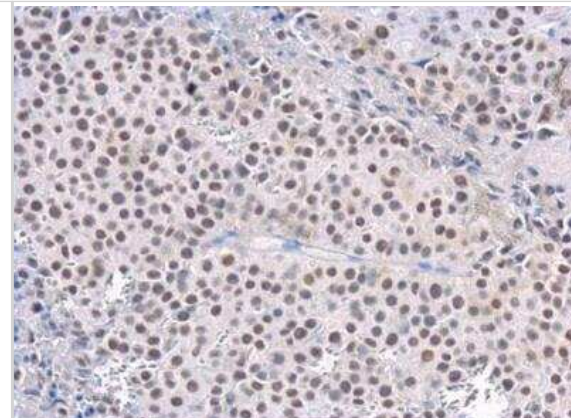
Immunohistochemistry-Paraffin: Rad50 Antibody (13B3) [NB100-147] - Human lung cancer. Rad50 stained by Rad50 antibody [13B3] diluted at 1:100. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



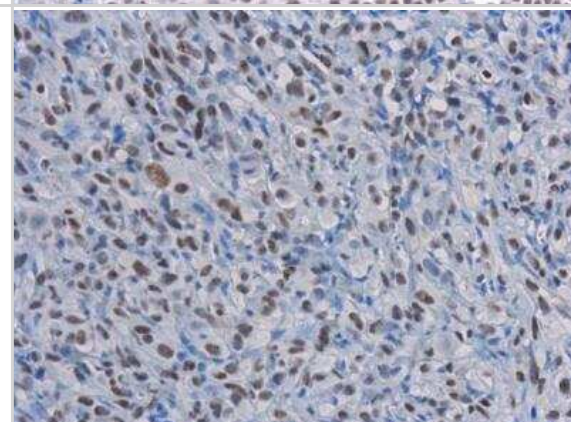
Western Blot: Rad50 Antibody (13B3) [NB100-147] - Analysis of RAD50 in 293T cell lysate using anti-RAD50 antibody. Image submitted by a verified customer review.



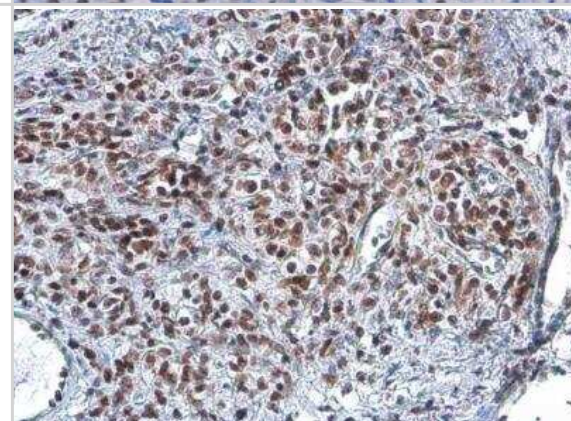
Immunohistochemistry-Paraffin: Rad50 Antibody (13B3) [NB100-147] - CAL 27 xenograft. Rad50 antibody [13B3] diluted at 1:200. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



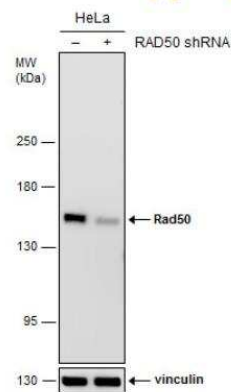
Immunohistochemistry-Paraffin: Rad50 Antibody (13B3) [NB100-147] - PC-3 xenograft. Rad50 antibody [13B3] diluted at 1:200. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



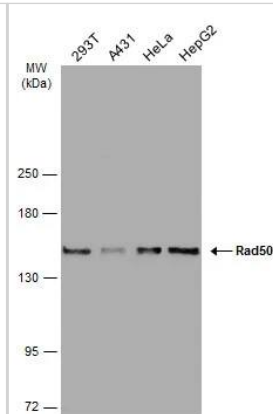
Immunohistochemistry-Paraffin: Rad50 Antibody (13B3) [NB100-147] - Human lung cancer. Rad50 stained by Rad50 antibody [13B3] diluted at 1:100. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



Western Blot: Rad50 Antibody (13B3) [NB100-147] - Non-transfected (-) and transfected (+) HeLa whole cell extracts (30 ug) were separated by 5% SDS-PAGE, and the membrane was blotted with Rad50 antibody [13B3].



**Western Blot: Rad50 Antibody (13B3) [NB100-147]** - Various whole cell extracts (30 ug) were separated by 5% SDS-PAGE, and the membrane was blotted with Rad50 antibody [13B3] (NB100-147) diluted at 1:1000. The HRP-conjugated anti-mouse IgG antibody was used to detect the primary antibody.



## Publications

Davis RM, Kiss B, Trivedi DR et al. Surface-Enhanced Raman Scattering Nanoparticles for Multiplexed Imaging of Bladder Cancer Tissue Permeability and Molecular Phenotype ACS Nano. 2018-10-23 [PMID: 30203645]

Chen H, Ma Z et al. The mTOR inhibitor rapamycin suppresses DNA double-strand break repair. Radiat Res 2011-01-02 [PMID: 21268715] (WB, Human)

Abuzeid W M, Jiang X et al. Molecular disruption of RAD50 sensitizes human tumor cells to cisplatin-based chemotherapy. J Clin Invest 2009-01-07 [PMID: 19487811] (WB, Human)

Sivalingam VN, Latif A, Kitson S et al. Hypoxia and hyperglycaemia determine why some endometrial tumours fail to respond to metformin Br. J. Cancer 2019-12-10 [PMID: 31819173] (IHC-P, Human)

Marie-Egyptienne DT, Chaudary N, Kalliomaki T et al. Cancer initiating-cells are enriched in the CA9 positive fraction of primary cervix cancer xenografts. Oncotarget. 2017-01-03 [PMID: 27901496] (IHC-P, Mouse)

Gorodetsky E, Calkins S, Ahn J, Brooks PJ ATM, the Mre11/Rad50/Nbs1 complex, and topoisomerase I are concentrated in the nucleus of Purkinje neurons in the juvenile human brain. DNA Repair (Amst) 2007-11-01 [PMID: 17706468]

Semba H, Takeda N, Isagawa T et al. HIF-1alpha-PDK1 axis-induced active glycolysis plays an essential role in macrophage migratory capacity. Nat Commun. 2016-05-18 [PMID: 27189088] (IF/IHC, Mouse)

Samba-Louaka A, Pereira Jm, Nahori Ma et al. Listeria monocytogenes Dampens the DnA Damage Response. PLoS Pathog. 2014-10-01 [PMID: 25340842] (ICC/IF, Human)

Khongkow P, Karunarathna U, Khongkow M et al. FOXM1 targets NBS1 to regulate DNA damage-induced senescence and epirubicin resistance. Oncogene. 2013-10-21 [PMID: 24141789] (WB, Mouse, Human)

Masuda Y, Noguchi K, Segawa H et al. Novel regulatory role for Kaposi's sarcoma-associated herpesvirus-encoded vFLIP in chemosensitization to bleomycin. Biochem Biophys Res Commun 2011-10-08 [PMID: 22037577] (Human)

Matsumoto Y, Miyamoto T, Sakamoto H et al. Two unrelated patients with MRE11A mutations and Nijmegen breakage syndrome-like severe microcephaly. DNA Repair (Amst) 2011-03-01 [PMID: 21227757] (Human)

Baydoun HH, Pancewicz J, Nicot C. Human T-lymphotropic type 1 virus p30 inhibits homologous recombination and favors unfaithful DNA repair. Blood 2011-06-01 [PMID: 21427292] (Human)

More publications at <http://www.novusbio.com/NB100-147>



### **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](http://www.novusbio.com)  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NB100-147-0.1ml**

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)
NBP2-47316PEP	Rad50 Recombinant Protein Antigen

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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