

# Product Datasheet

## DNA-PKcs Antibody NB100-658

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

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**NB100-658**

## DNA-PKcs Antibody

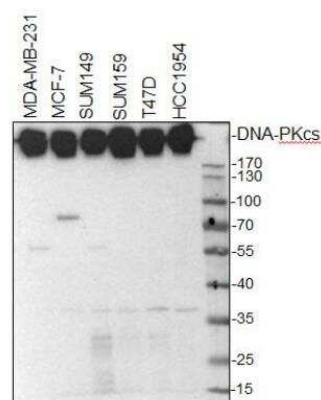
Product Information	
Unit Size	0.1 ml
Concentration	0.2 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	TBS, 0.1% BSA

Product Description	
Description	Novus Biologicals Rabbit DNA-PKcs Antibody (NB100-658) is a polyclonal antibody validated for use in WB and IP. Anti-DNA-PKcs Antibody: Cited in 3 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	5591
Gene Symbol	PRKDC
Species	Human
Immunogen	The immunogen recognized by this antibody maps to a region between residues 2050 and 2100 of human DNA-Dependent Protein Kinase, catalytic subunit using the numbering given in entry NP_008835.5 (GeneID 5591).

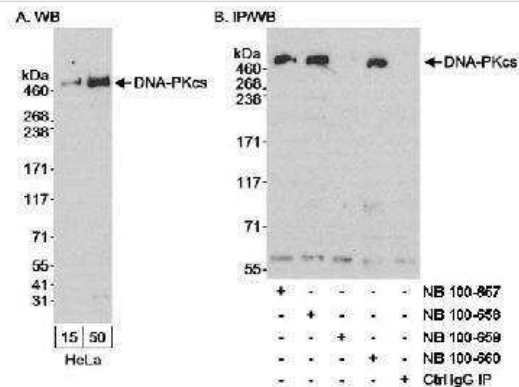
Product Application Details	
Applications	Western Blot, Immunoprecipitation, Knockdown Validated
Recommended Dilutions	Western Blot 1:1000 - 1:10000, Immunoprecipitation 2 - 5 ug/mg lysate, Knockdown Validated
Application Notes	Ku-80 co-immunoprecipitates with DNA-PKcs when using this antibody. DNA-PKcs antibody is validated for WB from a verified customer review.

**Images**

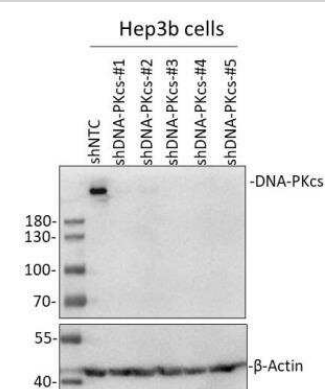
Western Blot: DNA-PKcs Antibody [NB100-658] - MDA-MB-231, MCF-7, SUM149, SUM159, T47D, HCC1954 whole cell lysates (50 ug/lane). 10% SDS-PAGE. DNA-PKcs (NB100-658) primary antibody at 1:1000, 4C, overnight. Western blot image submitted by a verified customer review.



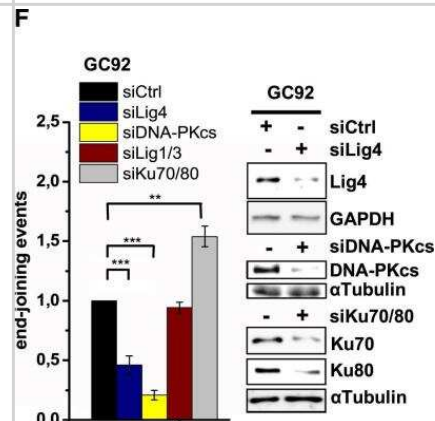
Western Blot: DNA-PKcs Antibody [NB100-658] - Detection of Human DNA-PKcs in HeLa whole cell lysate using NB100-658. DNA-PKcs was also immunoprecipitated using rabbit anti-DNA-PKcs antibodies NB100-657, NB100-659 and NB100-660.



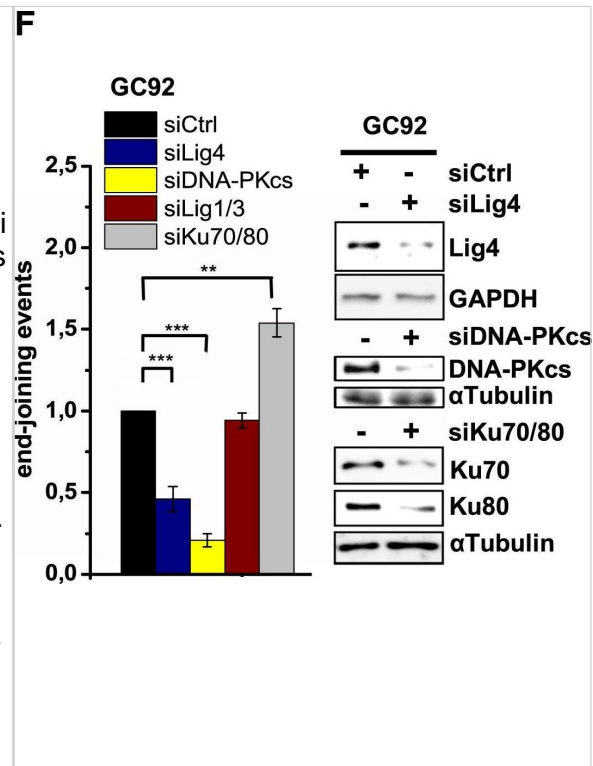
Western Blot: DNA-PKcs Antibody [NB100-658] - Hep3B human hepatocellular carcinoma cell line. 50 ug cell lysate per lane. 10% SDS-PAGE. DNA-PKcs antibody at 1:1000 dilution O/N. Secondary antibody: HRP-conjugated Donkey anti-rabbit IgG polyclonal antibody at 1:2000 dilution. WB image submitted by a verified customer review.



Western Blot: DNA-PKcs Antibody [NB100-658] - Molecular Characterization of G1 Resection. End joining events in GC92 cells treated with siKu70/80, siLig4, siLig1/3, or DNA-PKcs antibody. Data are mean +/- SEM. Image collected and cropped by CiteAb from the following publication (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5316416/>) licensed under a CC-BY license.



Western Blot: DNA-PKcs Antibody [NB100-658] - Molecular Characterization of G1 Resection(A) Schematic of the NHEJ reporter assay. The repair of two I-SceI-induced DSBs can result in loss of the intervening fragment, which is detected by a CD4+ signal (Rass et al., 2009). CD4+ clones were amplified by PCR (green arrows) across the repair site & sequenced. Repair of the two DSBs can also occur without loss of the intervening fragment, which escapes detection.(B)  $\gamma$ H2AX foci in GC92 WT & Artemis KO cells treated with siDNA-PKcs or siCtIP. Cells were transfected with I-SceI, & foci were scored in I-SceI+ & I-SceI- cells (identified by immunofluorescence [IF] against I-SceI). Data are mean  $\pm$  SEM.(C) End joining events in GC92 WT & Artemis KO cells containing the NHEJ reporter substrate. Cells were transfected with RFP or cMyc-Artemis constructs. Events were quantified by the fraction of CD4+ & RFP/cMyc+cells relative to all RFP/cMyc+cells, & results were normalized to WT cells. Data are mean  $\pm$  SEM.(D) End joining events in GC92 WT & Artemis KO cells treated with siCtIP. Data are mean  $\pm$  SEM.(E) Distribution of deletion sizes obtained from the sequence analysis of GC92 WT & siLig1/3-treated cells. nt, nucleotide.(F) End joining events in GC92 cells treated with siKu70/80, siLig4, siLig1/3, or siDNA-PKcs. Data are mean  $\pm$  SEM. See also Table S1. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/28132842>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Hong ES, Lim C, Choi HY et al. The amount of C1q-adiponectin complex is higher in the serum and the complex localizes to perivascular areas of fat tissues and the intimal-medial layer of blood vessels of coronary artery disease patients. *Cardiovasc Diabetol*. 2015-05-14 [PMID: 25956582]

### Details:

Adiponectin/Acrp30 antibody was used for IHC-P analysis of adipose/fat tissues (subcutaneous, visceral, and pericardial areas) and internal mammary artery sections from healthy controls and patients with coronary artery disease. The IHC-P assay implicated 4% paraformaldehyde fixation, ON 4C incubation of primary antibody and signal detection using Alexa Fluor 488 goat anti-rabbit IgG secondary antibody. Adiponectin/Acrp30 (APN) was found to be co-localized with complement component C1q along the perivascular areas of fat tissues and intimal-medial layer of the blood vessel (Figure 2).

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] (WB, Human)

Biehs R, Steinlage M, Barton O et al. DNA Double-Strand Break Resection Occurs during Non-homologous End Joining in G1 but Is Distinct from Resection during Homologous Recombination *Mol. Cell* 2017-01-25 [PMID: 28132842]



### **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@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NB100-658**

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NB800-PC1	HeLa Whole Cell Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **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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