

# Product Datasheet

## Nbs1 Antibody (1D7) - Azide and BSA Free NB100-221

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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**Reviews: 3 Publications: 21**

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**NB100-221**

Nbs1 Antibody (1D7) - 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	1D7
Preservative	No Preservative
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	85 kDa
Product Description	
Description	Novus Biologicals Mouse Nbs1 Antibody (1D7) - Azide and BSA Free (NB100-221) is a monoclonal antibody validated for use in IHC, WB, ICC/IF, Simple Western and IP. Anti-Nbs1 Antibody: Cited in 21 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	4683
Gene Symbol	NBN
Species	Human, Mouse, Rat
Reactivity Notes	Human reactivity reported in (PMID:30699358). 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	Nijmegen breakage syndrome (NBS, nibrin) is an autosomal recessive chromosomal instability syndrome characterized by microcephaly, growth retardation, immunodeficiency, and cancer predisposition. Nbs1 Antibody (1D7) recognizes the 95kDa NBS protein which contains a fork FHA head-associated domain that is adjacent to BRCT, a breast cancer C terminal domain, that has been implicated in protein-protein interactions. NBS is member of the Mre11/Rad50, p400 double-strand break repair complex involved in double-strand break repair and cell-cycle checkpoint functions.
Immunogen	The complete coding region of the human p95/Nbs1 expressed in E. coli.
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Knockdown Validated
Recommended Dilutions	Western Blot 1:500-1:3000, Simple Western, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:100, Immunoprecipitation, Knockdown Validated

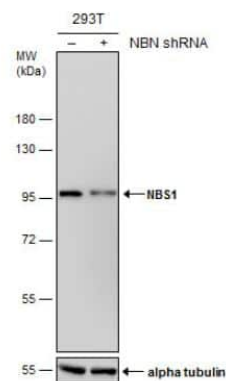


**Application Notes**

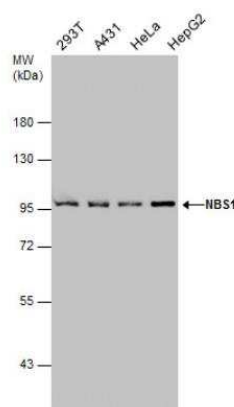
Use in IHC, ICC/IF, and Western Blot reported in (PMID:22075984). IP Assay dependent.  
See [Simple Western Antibody Database](#) for Simple Western validation: separated by size

**Images**

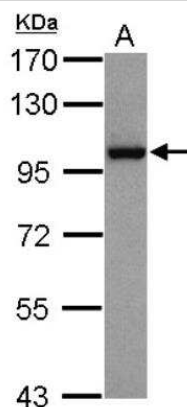
Western Blot: Nbs1 Antibody (1D7) [NB100-221] - Non-transfected (-) and transfected (+) 293T whole cell extracts (30 ug) were separated by 7.5% SDS-PAGE, and the membrane was blotted with NBS1 antibody (1D7) [NB100-221] diluted at 1:500. The HRP-conjugated anti-mouse IgG antibody [NBP2-19382] was used to detect the primary antibody.



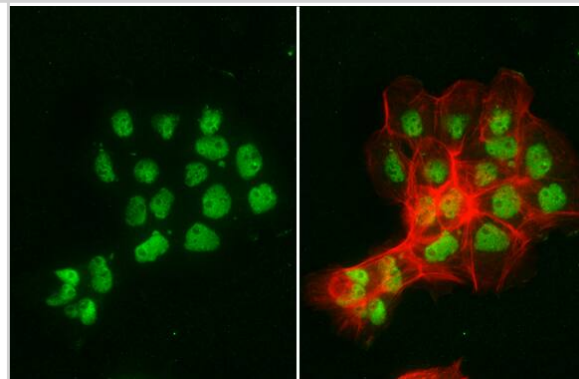
Western Blot: Nbs1 Antibody (1D7) [NB100-221] - Various whole cell extracts (30 ug) were separated by 7.5% SDS-PAGE, and the membrane was blotted with Nbs1 Antibody (1D7) [NB100-221] diluted at 1:500. The HRP-conjugated anti-mouse IgG antibody [NBP2-19382] was used to detect the primary antibody. Observed Molecular Weight at ~95 kDa.



Western Blot: Nbs1 Antibody (1D7) [NB100-221] - Sample (30 ug of whole cell lysate). A: HepG2. 7.5% SDS PAGE. Nbs1 Antibody (1D7) [NB100-221] diluted at 1:1000. The HRP-conjugated anti-mouse IgG antibody (NBP2-19382) was used to detect the primary antibody. Observed Molecular Weight at ~97 kDa.



Immunocytochemistry/ Immunofluorescence: Nbs1 Antibody (1D7) [NB100-221] - Nbs1 antibody [1D7] detects Nbs1 protein at nucleus by immunofluorescent analysis. Sample: A431 cells were fixed in 4% paraformaldehyde at RT for 15 min. Green: Nbs1 stained by Nbs1 antibody [1D7] (NB100-221) diluted at 1:500. Red: phalloidin, a cytoskeleton marker, diluted at 1:200.



## Publications

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)

Fagan-Solis KD, Simpson DA, Kumar RJ et al. A P53-Independent DNA Damage Response Suppresses Oncogenic Proliferation and Genome Instability Cell Rep 2020-02-04 [PMID: 32023457] (KD, WB, Mouse)

Volcic M, Sparrer KMJ, Koepke L et al. Vpu modulates DNA repair to suppress innate sensing and hyper-integration of HIV-1 Nat Microbiol 2020-07-20 [PMID: 32690953] (WB, Human)

Li CG, Mahon C, Sweeney NM et al. PPARγ Interaction with UBR5/ATMIN Promotes DNA Repair to Maintain Endothelial Homeostasis Cell Rep 2019-01-29 [PMID: 30699358] (WB, Human)

Choi SH, Hong HK, Cho YB et al. Identification of Sestrin3 Involved in the In vitro Resistance of Colorectal Cancer Cells to Irinotecan. PLoS ONE. 2015-05-15 [PMID: 25973791] (WB, Human)

Moudry P, Lukas C, Macurek L et al. Nucleoporin NUP153 guards genome integrity by promoting nuclear import of 53BP1. Cell Death Differ 2012-05-01 [PMID: 22075984] (ICC/IF, WB, IF/IHC, Human)

E X, Pickering MT, Debatis M et al. An E2F1-mediated DNA damage response contributes to the replication of human cytomegalovirus. PLoS Pathog 2011-05-01 [PMID: 21589897] (IF/IHC, WB, ICC/IF, Human)

Demogines A, East AM, Lee JH et al. Ancient and recent adaptive evolution of primate non-homologous end joining genes. PLoS Genet 2010-10-01 [PMID: 20975951] (ICC/IF, WB, IF/IHC, Human)

Cha H, Lowe JM, Li H et al. Wip1 directly dephosphorylates gamma-H2AX and attenuates the DNA damage response. Cancer Res 2010-05-01 [PMID: 20460517] (IF/IHC, WB, ICC/IF, Human)

Lee JH, Goodarzi AA, Jeggo PA et al. 53BP1 promotes ATM activity through direct interactions with the MRN complex. EMBO J 2010-02-01 [PMID: 20010693] (WB, ICC/IF, IF/IHC, Human)

Mandriota SJ, Buser R, Lesne L et al. Ataxia telangiectasia mutated (ATM) inhibition transforms human mammary gland epithelial cells. J Biol Chem 2010-04-01 [PMID: 20177072] (IF/IHC, ICC/IF, WB, Human)

Collaco RF, Bevington JM, Bhargava V et al. Adeno-associated virus and adenovirus coinfection induces a cellular DNA damage and repair response via redundant phosphatidylinositol 3-like kinase pathways. Virology 2009-09-01 [PMID: 19628243] (ICC/IF, WB, IF/IHC, Human)

More publications at <http://www.novusbio.com/NB100-221>





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### **Products Related to NB100-221**

NBL1-13497	Nbs1 Overexpression Lysate
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)

### **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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