Product Datasheet

Rad51D Antibody (5B3/6)
NB100-178

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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Publications: 3

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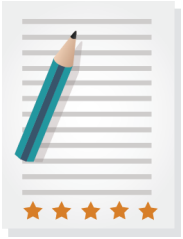
Updated 10/23/2024 v.20.1



NB100-178

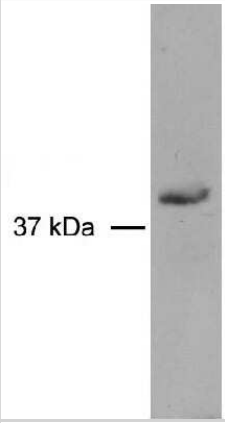
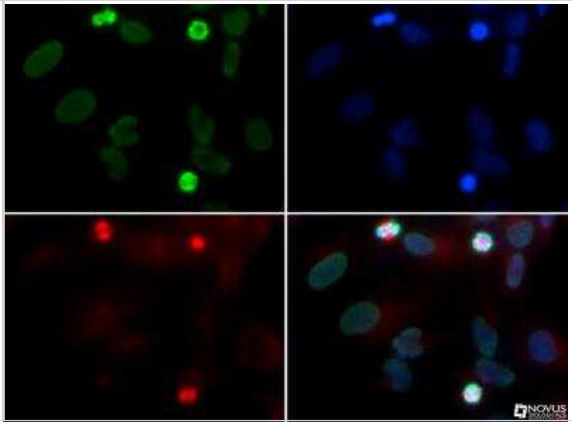
Rad51D Antibody (5B3/6)

Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at 4C. Do not freeze.
Clonality	Monoclonal
Clone	5B3/6
Preservative	0.1% Sodium Azide
Isotype	IgG1
Purity	Unpurified
Buffer	Ascites
Target Molecular Weight	40 kDa

Product Description	
Host	Mouse
Gene ID	5892
Gene Symbol	RAD51D
Species	Human, Mouse (Negative)
Reactivity Notes	This antibody does not work on mouse.
Immunogen	His-tagged human Rad51D, overexpressed in E. coli. [UniProt# O75771]

Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:500
Application Notes	This Rad51D (5B3/6) antibody is useful for Immunocytochemistry/Immunofluorescence and Western blot, where a band can be seen at ~40 kDa. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Images

Western Blot: Rad51D Antibody (5B3/6) [NB100-178] - Rad51D detected in HEK293 lysates using a 1:1,000 dilution of NB 100-178 (purified). Photo courtesy of B.T. Bennett & K. Knight of University of Massachusetts Medical School	
Immunocytochemistry/Immunofluorescence: Rad51D Antibody (5B3/6) [NB100-178] - RAD51D antibody was tested in HeLa cells with FITC (green). Nuclei and alpha-tubulin were counterstained with Dapi (blue) and Dylight 550 (red).	

Publications

Shammas MA, Shmookler Reis RJ, Koley H et al. Dysfunctional homologous recombination mediates genomic instability progression in myeloma. Blood 2009;113(10):2290-2297 [PMID: 19050310] (ICC/IF, Human)

Hinz, JM et al. Repression of mutagenesis by Rad51D-mediated homologous recombination. Nucleic Acids Res;34 (5):1358-68. 2006-03-06 [PMID: 16522646]

Fan, R et al. Defective DNA strand break repair after DNA damage in prostate cancer cells: implications for genetic instability and prostate cancer progression. Cancer Res;64(23):8526-33. 2004-12-01 [PMID: 15574758] (WB, Human)

Procedures

Western Blot protocol for Rad51D Antibody (NB100-178)
Rad51D Antibody (5B3/6):
Western Blot
1. Preparation of samples for loading gel: Heat ~50-80ug of sample containing laemmli loading dye (containing SDS) at 90C for ~2 minutes.
2. Load sample onto a 10% Tris-HCL gel (Bio-Rad pre-cast) and run for ~30 minutes at 200V (or until dye front reaches bottom of gel).
3. Place gel in transfer buffer for 10 minutes (192mM Glycine, 25mM Tris-HCL, 20% Methanol). Pre-soak two pieces of Whatman paper and PVDF, as well.

NOTE: The PVDF should be soaked in CH3OH for ~ 1minute, rinsed in ddH20 and then placed in transfer buffer.

4. Transfer the protein from the gel to the membrane using a semi-dry transfer apparatus. Run for 20 minutes at 20V.
5. Block non-specific proteins with blocking buffer #1 (10mM Tris-HCL pH 8.0, 300mM NaCL, 0.025% Tween 20)for 10 minutes. Then continue blocking in blocking buffer #2 (buffer #1 + 15% nonfat dry milk)for an additional hour, gently rocking at room temperature (RT) or overnight at 4C.
6. Dilute the primary antibody (anti-Rad51D, NB 100-178) in antibody dilution buffer (blocking buffer #1 + 2% milk).
7. Wash the membrane briefly with some blocking buffer #1 and then add your diluted primary antibody.
8. Incubate the primary for 1 hour at room temperature, gently rocking. Again this can be done overnight at 4C.
9. Wash 3X with blocking buffer #1 for 10 minutes, each, gently rocking.
10. Incubate the diluted secondary antibody (anti-mouse IgG conjugated to HRP), diluted in antibody dilution buffer, for
1 hour at room temperature, gently rocking.
11. Wash 2X with blocking buffer #1 for 10 minutes, each, gently rocking. Wash 1X with blocking buffer #1 for 30 minutes, gently rocking.
12. Develop membrane with your chemiluminescent substrate.

NOTE: HEK 293 and MCF-7 whole cell extracts have been used as positive controls for this antibody.

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Products Related to NB100-178

NBL1-15121	Rad51D 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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