# **Product Datasheet**

# Ki-67/MKI67 Antibody NB500-170SS

Unit Size: 0.025 ml

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

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## NB500-170SS

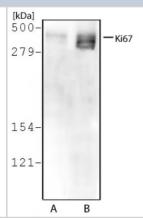
Ki-67/MKI67 Antibody

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Product Information	
Unit Size	0.025 ml
Concentration	1.03 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS, 30% glycerol
Product Description	
Host	Rabbit
Gene ID	4288
Gene Symbol	MKI67
Species	Human, Mouse, Rat, Porcine
Species Reactivity	Human, mouse, rat (pubmed 22521325) and porcine.
Marker	Proliferation Marker
Immunogen	A synthetic peptide made to an internal region of human Ki67 (within residues 1550-1700) [Swiss-Prot# P46013]
Product Application Details	
Applications	Western Blot, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Immunocytochemistry/Immunofluorescence 1:20-1:100, Immunohistochemistry 1:50-1:300, Immunohistochemistry-Paraffin 1:50-1:300, Western Blot 1-2 ug/ml
Application Notes	This Ki67 antibody is useful for Immunohistochemistry on frozen and paraffinembedded sections and Immunocytochemistry/Immunofluorescence. There have been mixed results in Western blot; however, NB500-170 has been used successfully Western Blog reported by a customer review. *Formalin fixed paraffin embedded tissue sections require high temperature antigen unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining. This antibody will not work without optimal antigen retrieval. This is probably the most critical step. NOTE: We suggest an incubation period of 30 minutes at room temperature and to use DAB to stain the protein (immunofluorescence may give problems as the protein is nuclear).

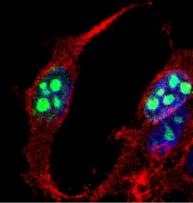


### **Images**

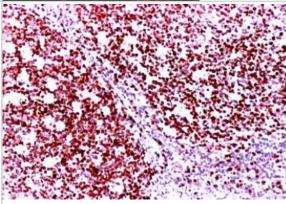
Western Blot: Ki67 Antibody [NB500-170] - Western blot analysis of A431 (A) and Hek293 (B) cell lysate using Ki67 antibody (NB500-170) at 2 ug/ml.



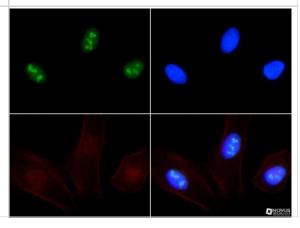
Immunocytochemistry/Immunofluorescence: Ki67 Antibody [NB500-170] - Confocal immunofluorescent analysis of MCF7 cells using Ki67 antibody (NB500-170, 1:5). An Alexa Fluor 488-conjugated Goat to rabbit IgG was used as secondary antibody (green). Actin filaments were labeled with Alexa Fluor 568 phalloidin (red). DAPI was used to stain the cell nuclei (blue).



Immunohistochemistry-Paraffin: Ki67 Antibody [NB500-170] - Human tonsil.

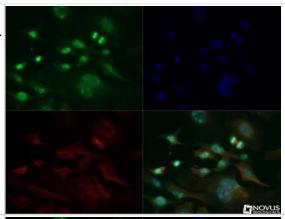


Immunocytochemistry/Immunofluorescence: Ki67 Antibody [NB500-170] - Ki67 antibody was tested at 1:25 in HeLa cells with FITC (green). Nuclei and actin were counterstained with Dapi (blue) and Phalloidin (red).

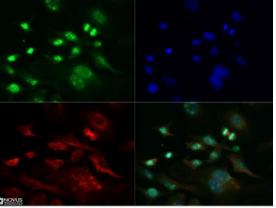




Immunocytochemistry/Immunofluorescence: Ki67 Antibody [NB500-170] - Ki67 antibody (1:100) was tested in HeLa cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). Image objective 40x.



Immunocytochemistry/Immunofluorescence: Ki67 Antibody [NB500-170] - Ki67 antibody was tested in HeLa cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). Image objective 40x. A dilution of 1:100 was used.



### **Publications**

Kawanishi Y, Nakasa T, Shoji T et al. Intra-articular injection of synthetic microRNA-210 accelerates avascular meniscal healing in rat medial meniscal injured model. Arthritis Res. Ther. 2014 Nov 28 [PMID: 25430980] (IHC-P, Rat)

#### Details:

Ki67 antibody used for IHC-P in Spraque Dawley rats subjected to intra-articular injection of double-stranded miR-210 (for control group using control dsRNA) with atelocollagen administered immediately after injury (injured meniscal healing in a rat model) - 4%PFA fixation, 4um sections, blocking with horse serum, Ki67 antibody diluted at 1:100 (Figure 4).

Uegaki T, Taniguchi F, Nakamura K et al. Inhibitor of apoptosis proteins (IAPs) may be effective therapeutic targets for treating endometriosis Hum. Reprod. 2014 Nov 05 [PMID: 25376458] (IHC-P, Mouse)

Xie H, Cui Z, Wang L et al. PDGF-BB secreted by preosteoclasts induces angiogenesis during coupling with osteogenesis. Nat. Med. 2014 Oct 05 [PMID: 25282358] (IHC, Mouse)

Hu H, Takano N, Xiang L et al. Hypoxia-inducible factors enhance glutamate signaling in cancer cells. Oncotarget 2014 Oct 15 [PMID: 25326682] (IHC-P, Human)

Takano N, Sarfraz Y, Gilkes DM et al. Decreased Expression of Cystathionine b-Synthase Promotes Glioma Tumorigenesis. Mol. Cancer Res. 2014 Jul 03 [PMID: 24994751] (IHC-P, Human)

#### Details:

Ki67 antibody used for IHC-P on tumor xenografts derived from injection of parental U87-MG cells and shCBS#07 subclone (Fig 1E, Fig 3D).

Sherman-Baust CA, Kuhn E, Valle BL et al. A genetically engineered ovarian cancer mouse model based on fallopian tube transformation mimics human high-grade serous carcinoma development. J. Pathol. 3/20/2014 [PMID: 24652535] (IHC-P, Mouse)

Sano M, Sasaki T, Hirakawa S et al. Lymphangiogenesis and angiogenesis in abdominal aortic aneurysm. PLoS ONE 3/21/2014 [PMID: 24651519] (IHC-P, Human)

Gou HF, Huang J, Shi HS, Wang YS. Chemo-immunotherapy with oxaliplatin and interleukin-7 inhibits colon cancer metastasis in mice. PLoS ONE 2014 Jan 27 [PMID: 24465710] (IHC-P, Mouse)

Kwon S, Kim MS, Lee ES, Park JK. A quantum dot-based microfluidic multi-window platform for quantifying the biomarkers of breast cancer cells. Integr Biol (Camb) 2014 Mar 5 [PMID: 24599518] (IHC-P, ICC/IF, Human)

Saggar JK, Tannock IF. Activity of the hypoxia-activated pro-drug TH-302 in hypoxic and perivascular regions of solid tumors and its potential to enhance therapeutic effects of chemotherapy. Int J Cancer. 2013 Nov 8 [PMID: 24338277] (IHC-Fr, ICC/IF, Human)

Niedworok C, Rock K, Kretschmer I et al. Inhibitory Role of the Small Leucine-Rich Proteoglycan Biglycan in Bladder Cancer. PLoS One. 2013 Nov 6 [PMID: 24223213] (IHC, Human)

Liu Y, Sanchez-Tillo E, Lu X et al. Rb1 family mutation is sufficient for sarcoma initiation. Nat Commun. 2013 Oct 23 [PMID: 24150016] (ICC/IF, Mouse)

More publications at <a href="http://www.novusbio.com/NB500-170">http://www.novusbio.com/NB500-170</a>





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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.

For more information on our guarantee, please visit www.novusbio.com/guarantee.

