Product Datasheet

Ki-67/MKI67 Antibody
NB110-89717SS

Unit Size: 0.025 ml

Store at 4C. Do not freeze.

Reviews: 3 Publications: 17

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Ki-67/MKI67 Antibody

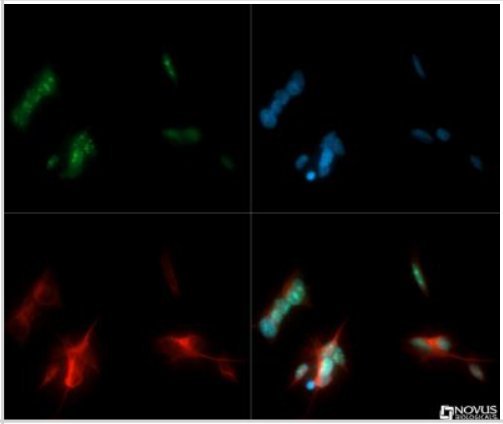
Product Information	
Unit Size	0.025 ml
Concentration	1 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Purity	Immunogen affinity purified
Buffer	Tris-citrate/phosphate, pH 7-8
Target Molecular Weight	324 kDa

Product Description	
Host	Rabbit
Gene ID	4288
Gene Symbol	MKI67
Species	Human, Mouse, Rat
Species Reactivity	Human and mouse. Rat reactivity reported in scientific literature (PMID: 24275061)
Marker	Proliferation Marker
Immunogen	Synthetic peptide made to an internal portion of the mouse Ki67 protein (within residues 1600-1700). [Swiss-Prot# Q61769]

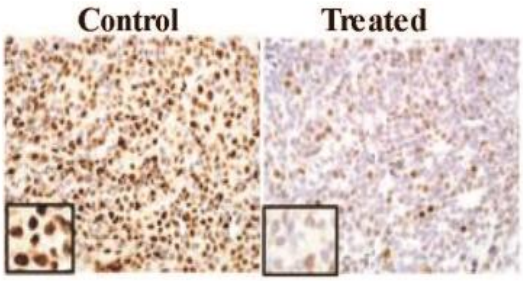
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Flow Cytometry 1:100, Immunocytochemistry/Immunofluorescence 1:10-1:500, Immunohistochemistry 1:100-1:500, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin 1:100-1:500, Western Blot 1:100-1:2000
Application Notes	This Ki67 antibody is useful for Flow Cytometry, Western blot (PMID 22384261), Immunohistochemistry and Immunofluorescence/immunocytochemistry. Immunohistochemistry-Frozen was reported in scientific literature. This antibody was also shown to be useful in Flow Cytometry analysis by a customer. Please see the product review for further details.

Images

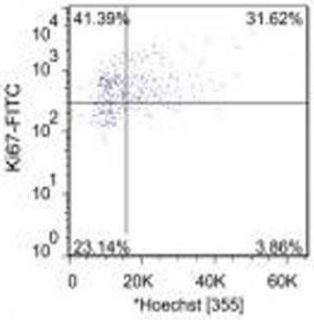
Immunocytochemistry/Immunofluorescence: Ki67 Antibody [NB110-89717] - Ki67 antibody was tested in SH-SY5Y cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



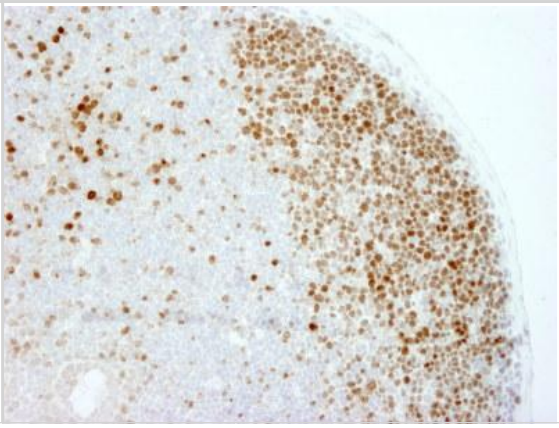
Immunohistochemistry-Paraffin: Ki-67/MKI67 Antibody [NB110-89717] - analysis of Ki-67 in human prostate xenograft control (left) and treated (right) using anti-Ki-67 antibody. Image from verified customer review.

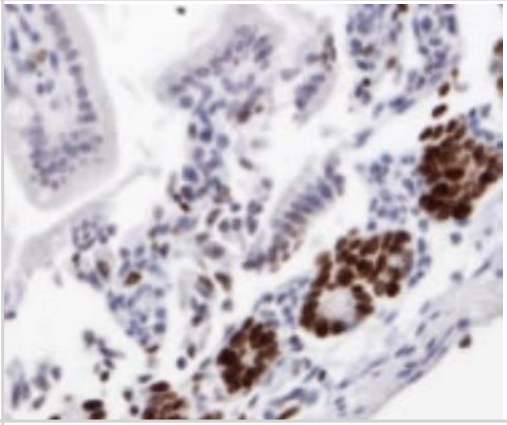
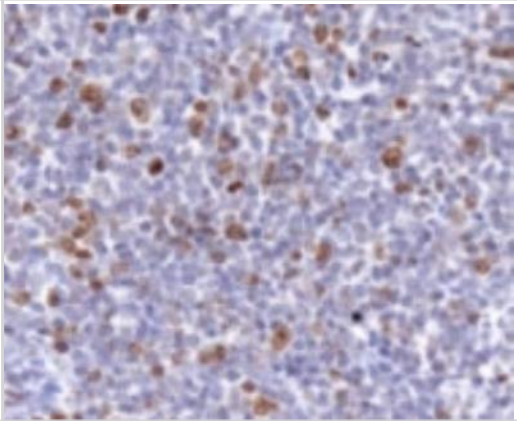


Flow Cytometry: Ki67 Antibody [NB110-89717] - Staining of mouse bone marrow cells using NB110-89717 at a dilution of 1:100. Photo courtesy of product review by verified customer.



Immunohistochemistry: Ki67 Antibody [NB110-89717] - FFPE section of mouse peyer's patch. Antibody: Affinity purified rabbit anti-mouse Ki-67 used at a dilution of 1:250. Detection: DAB staining using Immunohistochemistry Accessory Kit. Epitope Retrieval Buffer-High pH was substituted for Epitope Retrieval Buffer-Reduced pH.



Immunohistochemistry: Ki67 Antibody [NB110-89717] - Detection of Ki67 in formalin-fixed paraffin embedded mouse intestine using NB110-89717.	
Immunohistochemistry: Ki67 Antibody [NB110-89717] - Immunohistochemical analysis of mouse spleen.	

Publications

Mathes AI, Rice L, Affandi Aj et al. CpGB DnA activates dermal macrophages and specifically recruits inflammatory monocytes into the skin. Exp. Dermatol. 2014 Nov 25 [PMID: 25425469]

Rachidi S, Sun S, Wu Bx et al. Endoplasmic reticulum heat shock protein gp96 maintains liver homeostasis and promotes hepatocellular carcinogenesis. J. Hepatol. 2014 Nov 22 [PMID: 25463537]

Laskov I, Drudi L, Beauchamp MC et al. Anti-diabetic doses of metformin decrease proliferation markers in tumors of patients with endometrial cancer Gynecol. Oncol. 2014 Jun 24 [PMID: 24972190] (IHC-P, Human)

Details:
Ki67 antibody used for IHC-P in human endometrial cancer - diagnostic endometrial biopsy/before metformin and definitive surgery/after metformin treatment. FFPE sections stained on Discovery XT Autostainer with heat-induced epitope retrieval (Cell Conditioning solution CC1 pH 8.0 at 95 C for 60 min), primary diluted at 1:100, 32 min incubation at 37 C followed by the detection using Omnimap anti-Rabbit HRP and ChromoMap-DAB reagents (See full text for detailed protocol and staining images- Fig. 2A-B, Fig. 4 A-B).

Fong EL, Martinez M, Yang J et al. Hydrogel-Based 3D Model of Patient-Derived Prostate Xenograft Tumors Suitable for Drug Screening. Mol. Pharm. 2014 Apr 29 [PMID: 24779589] (ICC/IF, Human)

Beristain AG, Molyneux SD, Joshi PA et al. PKA signaling drives mammary tumorigenesis through Src. Oncogene 3/24/2014 [PMID: 24662820] (IHC-P, Mouse)

Kaenel P, Hahnewald S, Wotzkow C et al. Overexpression of EphB4 in the mammary epithelium shifts the differentiation pathway of progenitor cells and promotes branching activity and vascularization. Dev. Growth Differ. 3/18/2014 [PMID: 24635767] (IHC-P, Mouse)

Pusic AD, Pusic KM, Clayton BL et al. IFNgamma-stimulated dendritic cell exosomes as a potential therapeutic for remyelination. J Neuroimmunol. 2013 Nov 9 [PMID: 24275061] (IHC, ICC/IF, Rat)

Xiang L, Gilkes DM, Chaturvedi P et al. Ganetespib blocks HIF-1 activity and inhibits tumor growth, vascularization, stem cell maintenance, invasion, and metastasis in orthotopic mouse models of triple-negative breast cancer. J Mol Med (Berl). 2013 Nov 20 [PMID: 24248265] (IHC-P, Mouse)

Steven A, Leisz S, Massa C et al. HER-2/neu Mediates Oncogenic Transformation via Altered CREB Expression and Function. Mol Cancer Res. 2013 Nov [PMID: 24025972] (IHC-P, Mouse)

Saha MN, Jiang H, Yang Y et al. PRIMA-1Met/APR-246 Displays High Antitumor Activity in Multiple Myeloma By Induction of p73 and Noxa. Mol Cancer Ther. 2013 Nov [PMID: 24030633] (IHC, Human)

He ZY, Wei XW, Luo M et al. Folate-linked lipoplexes for short hairpin RNA targeting claudin-3 delivery in ovarian cancer xenografts. J Control Release. 2013 Oct 18 [PMID: 24144916] (WB, Human)

Tang Y, Cheng Y, Martinka M et al. Prognostic significance of KAI1/CD82 in Human melanoma and its role in cell migration and invasion through the regulation of ING4. Carcinogenesis. 2013 Nov 16 [PMID: 24130172] (WB, IHC, Human)

More publications at http://www.novusbio.com/NB110-89717

Procedures

Immunohistochemistry Protocol specific for Ki67 Antibody (NB110-89717)
Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer pH 6.0 then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench top for 30 minutes.

Staining:

1) Wash sections in dH2O three times for 5 minutes each.
2) Wash section in wash buffer (1X PBS/0.1% Tween-20 (1X PBST)) for 5 minutes.
3) Block each section with 100-400 ul blocking solution (1X PBST, 5% goat serum) for 1 hour at room temperature.
4) Remove blocking solution and add 100-400 ul primary antibody diluted in 1X PBST, 5% goat serum to each section. Incubate overnight at 4C.
5) Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6) Add 100-400 ul biotinylated secondary antibody, diluted in 1X PBST, 5% goat serum. Incubate 30 minutes at room temperature.
7) Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8) Add 100-400 ul Striptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9) Wash sections three times in wash buffer for 5 minutes each.
10) Add 100-400 ul DAB substrate to each section and monitor staining closely.
11) As soon as the sections develop, immerse slides in dH2O.
12) Counterstain sections in hematoxylin.
13) Wash sections in dH2O two times for 5 minutes each.
14) Dehydrate sections.
15) Mount coverslips.

Immunocytochemistry/Immunofluorescence protocol for Ki67 antibody (NB110-89717)
Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

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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.