Product Datasheet

Ki67/MKI67 Antibody

NB110-89717

Unit Size: 0.1 ml

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

Reviews: 7  Publications: 47

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:

www.novusbio.com/NB110-89717

Updated 12/18/2019 v.20.1

Earn rewards for product reviews and publications.
Submit a publication at www.novusbio.com/publications
Submit a review at www.novusbio.com/reviews/destination/NB110-89717
**NB110-89717**  
Ki67/MKI67 Antibody

### Product Information

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Size</td>
<td>0.1 ml</td>
</tr>
<tr>
<td>Concentration</td>
<td>1 mg/ml</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Preservative</td>
<td>0.05% Sodium Azide</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
</tr>
<tr>
<td>Purity</td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td>Buffer</td>
<td>PBS</td>
</tr>
<tr>
<td>Target Molecular Weight</td>
<td>351 kDa</td>
</tr>
</tbody>
</table>

### Product Description

**Host**  
Rabbit

**Gene ID**  
4288

**Gene Symbol**  
MKI67

**Species**  
Human, Mouse, Rat

**Reactivity Notes**  
Ki67/MKI67 Antibody reacted with Rat in in scientific literature (PMID: 24275061).

**Marker**  
Proliferation Marker

**Immunogen**  
The immunogen for this Ki67/MKI67 Antibody was made using a synthetic peptide from the internal region of Mouse Ki67/MKI67, between aminoacids 1850-1950 (1899-1916) Uniprot# E9PVX6.

### Product Application Details

**Applications**  
Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin

**Recommended Dilutions**  
Western Blot 1:100-1:2000, Flow Cytometry 1:100, Immunohistochemistry 1:100-1:500, Immunohistochemistry-Paraffin 1:100-1:500, Immunohistochemistry-Paraffin 1:100-1:500, Immunohistochemistry-Frozen

**Application Notes**  
Ki67/MKI67 antibody validated for Flow from a verified customer review. WB (PMID: 22384261), IHC (PMID: 28832561), and ICC/IF (PMID: 24779589).

### Images

Immunohistochemistry: Ki67/MKI67 Antibody [NB110-89717] - KLF4 ablation leads to abnormal proliferation and differentiation in small intestinal epithelium. Higher magnification IHC staining of highlighted frames. Small intestine from Klf4-/- mice induced by tamoxifen for different time endurances were stained by H&E and PAS, and also immunohistochemistry staining was performed with anti-Ki67, anti-Lysozyme, anti-DCAMKL-1, and anti-PCNA antibodies respectively. Bottom panel: IHC staining with ZO-1 antibody in one-month knockout intestine tissue. Image collected and cropped by CiteAb from the following publication (http://dx.plos.org/10.1371/journal.pone.0032492) licensed under a CC-BY licence.
Immunohistochemistry-Paraffin: Ki-67/MKI67 Antibody [NB110-89717] - Staining of a cross section of mouse spleen. Detection: DAB staining using Immunohistochemistry Accessory Kit. Epitope Retrieval Buffer-High pH was substituted for Epitope Retrieval Buffer-Reduced pH.


Immunohistochemistry-Paraffin: Ki67/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/MKI67 Antibody [NB110-89717] - An intracellular stain was performed on U-937 cells with NB110-89717PE (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Phycoerythrin.
Immunocytochemistry/Immunofluorescence: Ki67/MKI67 Antibody [NB110-89717] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.5% Triton X-100. The cells were incubated with anti-Ki-67/MKI67 at 2 ug/ml overnight at 4C and detected with an anti-rabbit DyLight 488 (green) at a 1:500 dilution. Nuclei were counterstained with DAPI (blue). Cells were imaged using a 40X objective.

Flow Cytometry: Ki67/MKI67 Antibody [NB110-89717] - An intracellular stain was performed on HeLa cells with Ki-67/MKI67 antibody NB110-89717PE (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Phycoerythrin.

Immunohistochemistry: Ki67/MKI67 Antibody [NB110-89717] - Analysis of a mouse intestine cross section. The antibody was used at a dilution of 1:250. Detection: DAB staining. Epitope Retrieval Buffer-High pH was substituted for Epitope Retrieval Buffer-Reduced pH.

Immunohistochemistry: Ki67/MKI67 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.

## Publications


Details:
Citation using the Allophycocyanin version of this antibody.

Li, S;Song, Y;Quach, C;Guo, H;Jang, GB;Maazi, H;Zhao, S;Sands, NA;Liu, Q;In, GK;Peng, D;Yuan, W;Machida, K;Yu, M;Akbari, O;Hagiya, A;Yang, Y;Punj, V;Tang, L;Liang, C; Transcriptional regulation of autophagy-lysosomal function in BRAF-driven melanoma progression and chemoresistance Nat Commun Apr 12 2019 12:00AM [PMID: 30979895] (IHC, Human)

Gunin, AG;Golubtsova, NN;Kravtsova, OA;Subbotkin, AS;Subbotkina, NO;Filippov, FN; Number, Proliferative Activity, and Expression of Thyroid Hormone Receptors in Dermal Fibroblasts in Mice with Changed Thyroid Status Bull. Exp. Biol. Med. Apr 26 2019 12:00AM [PMID: 31028589] (IHC, Mouse)

Gunin, A;Golubtsova, N;Subbotkina, N;Subbotkin, A; The Influence of Metformin on Age-Related Changes in the Number and Proliferation of Dermal Fibroblasts in Mice Adv Gerontol Jan 1 2019 12:00AM [PMID: 30607913] (IHC, Mouse)


**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 Striaptavind-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 1:25,000 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.*
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 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB110-89717

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications