Product Datasheet

Ki-67/MKI67 Antibody

NB110-89719

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

Reviews: 3  Publications: 14

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Updated 6/27/2018 v.20.1

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# Ki-67/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. Do not freeze.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Preservative</td>
<td>0.1% 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>TBS and 0.1% BSA</td>
</tr>
<tr>
<td>Target Molecular Weight</td>
<td>359 kDa</td>
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</table>

## Product Description

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Gene ID</td>
<td>4288</td>
</tr>
<tr>
<td>Gene Symbol</td>
<td>MKI67</td>
</tr>
<tr>
<td>Species</td>
<td>Human, Mouse</td>
</tr>
<tr>
<td>Reactivity Notes</td>
<td>Human and mouse.</td>
</tr>
<tr>
<td>Marker</td>
<td>Proliferation Marker</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide made to an internal portion of the mouse Ki67 protein, within residues 1800-1850. [UniProt# P46013]</td>
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## Product Application Details

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td>Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin</td>
</tr>
<tr>
<td>Recommended Dilutions</td>
<td>Western Blot, Flow Cytometry, Immunohistochemistry 1:100-1:500, Immunocytochemistry/Immunofluorescence 1:50-1:200, Immunohistochemistry-Paraffin 1:100-1:500, Immunohistochemistry-Frozen</td>
</tr>
<tr>
<td>Application Notes</td>
<td>This Ki67 antibody is useful for Immunohistochemistry paraffin embedded sections and Immunocytochemistry/Immunofluorescence. Immunohistochemistry-Frozen and Western Blot were reported in scientific literature. Use in FLOW cytometry reported in scientific literature (PMID 25733567) 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.</td>
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</tbody>
</table>
**Images**


**Immunocytochemistry/Immunofluorescence: Ki-67/MKI67 Antibody [NB110-89719] -** 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 [NB110-89719] -** IHC analysis of a formalin fixed paraffin embedded tissue section of mouse intestine using 1:200 dilution of rabbit anti-KI67 antibody. The staining was developed with HRP labeled anti-rabbit IgG secondary antibody and DAB reagent, and nuclei of cells were counter-stained with hematoxylin. This antibody generated a specific nuclear staining in epithelial cells and the staining was more intense in the cells close to the bases of crypts. Weak to moderate positivity was found at the cytoplasmic level also.

Publications


Shinohara T, Kazuki K, Ogonuki N et al. Transfer of a Mouse Artificial Chromosome into Spermatogonial Stem Cells Generates Transchromosomic Mice Stem Cell Reports 2017 Oct 10 [PMID: 28943251] (Flow, Mouse)

Yoon J, Leyva-Castillo JM, Wang G et al. IL-23 induced in keratinocytes by endogenous TLR4 ligands polarizes dendritic cells to drive IL-22 responses to skin immunization. J. Exp. Med. Aug 22 2016 12:00AM [PMID: 27551155] (IHC, Mouse)

Liou JC, Teng MC, Tsai YS et al. UV-blocking spectacle lens protects against UV-induced decline of visual performance. Mol Vis 2015 [PMID: 26283865]


Details:
Ki-67/MKI67 antibody used for IHC-P on murine jejunum tissue sections in experiments involving the modulatory effects of a Japanese Traditional Herbal Medicine called Saireito on 5-Fluorouracil-Induced Intestinal Mucositis in Mice. IHC-P Assay involved - 10% neutralized formalin fixation of tissues, paraffin embedding followed by 4um sectioning, antigen retrieval with HistoVT One solution/90C for 20 minutes in water bath, endogenous peroxidases blocked with 3%H2O2, primary detection with Vectastain Elite ABC rabbit IgG kit followed by counter-staining with hematoxylin (Figure 6).


More publications at http://www.novusbio.com/NB110-89719
Procedures

Immunohistochemistry Protocol specific for Ki67 Antibody (NB110-89719)

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.
Wash sections in dH2O three times for 5 minutes each.
Wash section in wash buffer for 5 minutes.
Block each section with 100-400 ul blocking solution (1X PBST, 5% goat serum) for 1 hour at room temperature.
Remove blocking solution and add 100-400 ul primary antibody diluted in 1X PBST, 5% goat serum to each section.
Incubate overnight at 4C.
Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
Add 100-400 ul biotinylated secondary antibody, diluted in 1X PBST, 5% goat serum. Incubate 30 minutes at room temperature.
Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
Add 100-400 ul Striptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
Wash sections three times in wash buffer for 5 minutes each.
Add 100-400 ul DAB substrate to each section and monitor staining closely.
As soon as the sections develop, immerse slides in dH2O.
Wash sections in dH2O two times for 5 minutes each.
Mount coverslips.

Immunocytochemistry/Immunofluorescence Protocol for Ki67 antibody (NB110-89719)
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.
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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Products Related to NB110-89719

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<tbody>
<tr>
<td>NBP2-64670</td>
<td>Ki-67/MKI67 Knockout HeLa Cell Lysate</td>
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<tr>
<td>HAF008</td>
<td>Goat anti-Rabbit IgG Secondary Antibody [HRP (Horseradish Peroxidase)]</td>
</tr>
<tr>
<td>NB7156</td>
<td>Goat anti-Rabbit IgG (H+L) Secondary Antibody</td>
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<tr>
<td>NBP2-24891</td>
<td>Rabbit IgG Isotype Control</td>
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