

## Alexa Fluor® 647 anti-mouse Ki-67 Antibody

<b>Catalog# / Size</b>	652407 / 25 µg 652408 / 100 µg
<b>Clone</b>	16A8
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	KiA, proliferation-related Ki-67 antigen
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	The nuclear protein Ki-67 was first identified by the monoclonal antibody Ki-67, which was generated by immunizing mice with nuclei of the L428 Hodgkin lymphoma cell line. Ki-67 protein plays an essential role in ribosomal RNA transcription and cell proliferation. Expression of Ki-67 occurs during G1, S, G2, and M phase, while in G0 phase the Ki-67 protein is not detectable. Ki-67 is strongly expressed in proliferating cells and has been reported as a prognostic marker in various tumors.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	<i>E. coli</i> expressed partial mouse Ki-67 recombinant protein, 1816-2163 aa.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	<p>Each lot of this antibody is quality control tested by our Ki-67 staining protocol below. For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application References</b>	<ol style="list-style-type: none"><li>1. Medina-Reyes EI, <i>et al.</i> 2015. <i>Environ Res.</i> 136:424. <a href="#">PubMed</a></li><li>2. Guillaumond F, <i>et al.</i> 2015. <i>PNAS.</i> 112:2473. <a href="#">PubMed</a></li><li>3. Sharma SK, <i>et al.</i> 2015. <i>J Immunol.</i> 194:5529. <a href="#">PubMed</a></li><li>4. Rodero MP, <i>et al.</i> 2014. <i>J. Invest. Dermatol.</i> 7:1991-7. <a href="#">PubMed</a></li></ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	<ol style="list-style-type: none"><li>1. McCoy S 2014. <i>Am J Physiol Lung Cell Mol Physiol.</i> 307:618. <a href="#">PubMed</a></li><li>2. Jtte BB, <i>et al.</i> 2021. <i>iScience.</i> 24(8):102833. <a href="#">PubMed</a></li><li>3. Garg G <i>et al.</i> 2019. <i>Cell reports.</i> 26(7):1854-1868. <a href="#">PubMed</a></li><li>4. Lu P, <i>et al.</i> 2021. <i>Blood Cancer J.</i> 11:39. <a href="#">PubMed</a></li><li>5. Benet Z, <i>et al.</i> 2021. <i>Cell Reports.</i> 34(6):108733. <a href="#">PubMed</a></li><li>6. Hu Y, <i>et al.</i> 2022. <i>J Nanobiotechnology.</i> 20:417. <a href="#">PubMed</a></li><li>7. Yang T, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:4464. <a href="#">PubMed</a></li></ol>

8. Chierico L, *et al.* 2017. PLoS One. 12(2):e0171815. [PubMed](#)
9. Tedeschi A, *et al.* 2020. Nat Commun. 11:1746. [PubMed](#)
10. Shaikh H, *et al.* 2021. Front Immunol. 12:689896. [PubMed](#)
11. Weis V, *et al.* 2016. Cell Mol Gastroenterol Hepatol. 2:131-157. [PubMed](#)
12. Shimizu H, *et al.* 2019. JCI Insight. 4:4. [PubMed](#)
13. Subbarayal B, *et al.* 2016. J Immunol. 197: 3464 - 3470. [PubMed](#)
14. Zhang X, *et al.* 2020. Glia. . [PubMed](#)

**RRID** AB\_2562138 (BioLegend Cat. No. 652407)  
 AB\_2562139 (BioLegend Cat. No. 652408)

## Antigen Details

<b>Structure</b>	325 kD protein containing a forkhead-associated domain (FHA) and 13 tandem repeats
<b>Distribution</b>	Nucleus and chromosome
<b>Function</b>	Required for cell cycle progression and proliferation
<b>Interaction</b>	Interacts with KIF15; binds to MKI67IP through FHA domain
<b>Biology Area</b>	Cell Biology, Cell Cycle/DNA Replication, Transcription Factors
<b>Molecular Family</b>	Nuclear Markers
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Starborg M, <i>et al.</i> 1996. <i>J. Cell. Sci.</i> 109:143.</li> <li>2. Byeon IJ, <i>et al.</i> 2005. <i>Nat. Struct. Mol. Biol.</i> 12:987.</li> <li>3. Yerushalmi R, <i>et al.</i> 2010. <i>Lancet. Oncol.</i> 11:174.</li> <li>4. Beltrami AP, <i>et al.</i> 2001. <i>N. Engl. J. Med.</i> 344:1750.</li> <li>5. Sachsenberg N, <i>et al.</i> 1998. <i>J. Exp. Med.</i> 187:1295.</li> <li>6. Nagy Z, <i>et al.</i> 1997. <i>Acta. Neuropathol.</i> 93:294.</li> </ol>
<b>Gene ID</b>	<a href="#">17345</a>

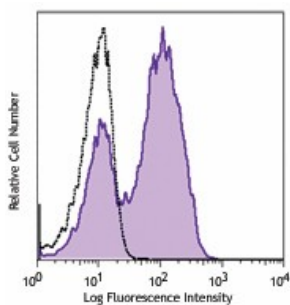
## Related Protocols

[Ki-67 Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-mouse Ki-67, PE anti-mouse Ki-67, APC anti-mouse Ki-67, Alexa Fluor® 647 anti-mouse Ki-67, FITC anti-mouse Ki-67, Brilliant Violet 421™ anti-mouse Ki-67, Brilliant Violet 605™ anti-mouse Ki-67, Alexa Fluor® 488 anti-mouse Ki-67, Alexa Fluor® 700 anti-mouse Ki-67, Pacific Blue™ anti-mouse Ki-67, PerCP/Cyanine5.5 anti-mouse Ki-67, PE/Cyanine7 anti-mouse Ki-67, PE/Dazzle™ 594 anti-mouse Ki-67

## Product Data



Con A-stimulated (3 days) BALB/c mouse splenocytes were fixed and permeabilized with 70% ethanol, then stained with Ki-67 (clone 16A8) Alexa Fluor® 647 (filled histogram) or rat IgG2a, κ Alexa Fluor® 647 isotype control (open histogram).

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