

Alexa Fluor® 700 anti-mouse Ki-67 Antibody

Catalog# / Size	652419 / 25 µg 652420 / 100 µg
Clone	16A8
Regulatory Status	RUO
Other Names	KiA, proliferation-related Ki-67 antigen
Isotype	Rat IgG2a, κ
Description	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

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	<i>E. coli</i> expressed partial mouse Ki-67 recombinant protein, 1816-2163 aa.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	<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 ≤0.125 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® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Red Laser (633 nm)
Application References	<ol style="list-style-type: none"> Medina-Reyes EI, <i>et al.</i> 2015. <i>Environ Res.</i> 136:424. PubMed Guillaumond F, <i>et al.</i> 2015. <i>PNAS.</i> 112:2473. PubMed Sharma SK, <i>et al.</i> 2015. <i>J Immunol.</i> 194:5529. PubMed Rodero MP, <i>et al.</i> 2014. <i>J. Invest. Dermatol.</i> 7:1991-7. PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> Otano I, <i>et al.</i> 2021. <i>Nat Commun.</i> 12:7296. PubMed Hill DL, <i>et al.</i> 2021. <i>Elife.</i> 10:. PubMed Hu W, <i>et al.</i> 2021. <i>Nat Immunol.</i> 22:1163. PubMed Lee JL, <i>et al.</i> 2022. <i>Aging Cell.</i> 21:e13692. PubMed

5. Chen Z *et al.* 2019. *Immunity*. 51(5):840-855 . [PubMed](#)
6. Pasciuto E, *et al.* 2020. *Cell*. 182:625. [PubMed](#)
7. Chen Z, *et al.* 2021. *Cell*. 184(5):1262-1280.e22. [PubMed](#)
8. Silva-Cayetano A, *et al.* 2020. *Med*. 2(3):243-262.e8. [PubMed](#)
9. Xia L, *et al.* 2021. *Cell Chemical Biology*. 28(5):610-624.e5. [PubMed](#)
10. Song W, *et al.* 2022. *Immunity*. 55:290. [PubMed](#)
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RRID AB_2564284 (BioLegend Cat. No. 652419)
 AB_2564285 (BioLegend Cat. No. 652420)

Antigen Details

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

Gene ID [17345](#)

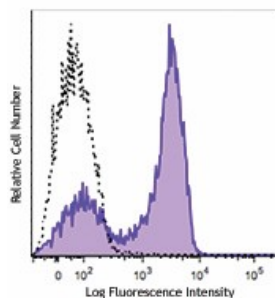
Related Protocols

[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+IL-2 stimulated (3 days) C57BL/6 mouse splenocytes were fixed and permeabilized with 70% ethanol, and then stained with Ki-67 (clone 16A8) Alexa Fluor® 700 (filled histogram). Unstained cells are represented by the open histogram.

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