

Pacific Blue™ anti-mouse Ki-67 Antibody

Catalog# / Size	652421 / 25 µg 652422 / 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 Pacific Blue™ 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 ≤1.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ 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	Violet Laser (405 nm)
Application References	<ol style="list-style-type: none">1. Medina-Reyes EI, <i>et al.</i> 2015. <i>Environ Res.</i> 136:424. PubMed2. Guillaumond F, <i>et al.</i> 2015. <i>PNAS.</i> 112:2473. PubMed3. Sharma SK, <i>et al.</i> 2015. <i>J Immunol.</i> 194:5529. PubMed4. 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">1. Sim HJ, <i>et al.</i> 2022. <i>Sci Adv.</i> 8:eabl4222. PubMed2. Saint Fleur–Lominy S, <i>et al.</i> 2018. <i>Cell Rep.</i> 24:3045. PubMed3. Ise W, <i>et al.</i> 2018. <i>Immunity.</i> 48:702. PubMed4. Wiedemann GM, <i>et al.</i> 2020. <i>Cell Rep.</i> 33:108498. PubMed

5. Yomtoubian S, *et al.* 2020. *Cell Reports*. 30(3):755-770.e6.. [PubMed](#)
6. Huang H, *et al.* 2021. *Cell*. 184(5):1245-1261.e21. [PubMed](#)
7. Mesnieres M, *et al.* 2021. *Cell Reports*. 36(8):109618. [PubMed](#)
8. Chryplewicz A, *et al.* 2022. *Cancer Cell*. 40:1111. [PubMed](#)

RRID AB_2564489 (BioLegend Cat. No. 652421)
AB_2564490 (BioLegend Cat. No. 652422)

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

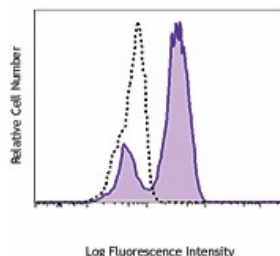
Related Protocols

[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-stimulated (three days) C57BL/6 mouse splenocytes were fixed and permeabilized with 70% ethanol, then stained with Ki-67 (clone 16A8) Pacific Blue™ (filled histogram) or rat IgG2a, κ Pacific Blue™ isotype control (open histogram).

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