

Brilliant Violet 421™ anti-mouse Ki-67 Antibody

Catalog# / Size	652411 / 50 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 and BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
Concentration	0.2 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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</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. PubMed 2. Guillaumond F, <i>et al.</i> 2015. <i>PNAS.</i> 112:2473. PubMed 3. Sharma SK, <i>et al.</i> 2015. <i>J Immunol.</i> 194:5529. PubMed 4. 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. Piper CJM, <i>et al.</i> 2020. <i>Cell Reports.</i> 29(7):1878-1892.e7.. PubMed 2. Choi H <i>et al.</i> 2019. <i>Cell Rep.</i> 27(3):806-819 . PubMed 3. Montes de Oca R, <i>et al.</i> 2021. <i>Mol Cancer Ther.</i> 20:1941. PubMed

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RRID AB_2562663 (BioLegend Cat. No. 652411)

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

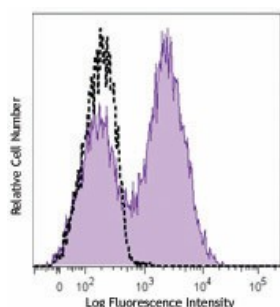
Related Protocols

[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) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ isotype control (open histogram).

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