

Ki-67 Monoclonal Antibody (20Raj1), eFluor™ 615, eBioscience™

Product Details

Size	100 µg
Species Reactivity	Dog, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), eFluor™ 615, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	20Raj1
Conjugate	eFluor™ 615
Excitation/Emission Max	595/614 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10733021

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1 µg/mL	-
Immunocytochemistry (ICC/IF)	1 µg/mL	2 Publications

Product Specific Information

Description: The monoclonal antibody 20Raj1 recognizes the human Ki-67 protein. Two isoforms of Ki-67 exist, a 345 and 395 kDa form that are expressed in dividing cells. Ki-67 is expressed in all cell types and is detectable during active phases of the cell cycle (G1, S, G2, and mitosis) but is absent from resting cells (G0). During interphase, Ki-67 expression is localized to the nucleus but redistributes to the chromosomes during mitosis and has specifically been found to associate with heterochromatin-bound proteins such as chromobox protein homolog 3 (CBX3). In studies of tumor cells, Ki-67 expression has been used as a marker for determining the fraction of proliferating cells within a given population of tumor cells.

This monoclonal antibody 20Raj1 recognizes canine Ki-67.

Applications Reported: This 20Raj1 antibody has been reported for use in immunocytochemical and immunohistochemical staining of paraffin-embedded tissue (IHC-P).

Applications Tested: This 20Raj1 antibody has been tested by immunocytochemistry on formaldehyde-fixed and permeabilized HeLa cells, and immunohistochemistry on FFPE human skin using low pH antigen retrieval. For immunocytochemistry and immunohistochemistry, this can be used at less than or equal to 1 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filter Recommendation: When using this eFluor® 615 antibody conjugate, we recommend a filter that will capture the 615 emission wavelength. A standard Alexa Fluor® 594 filter is acceptable.

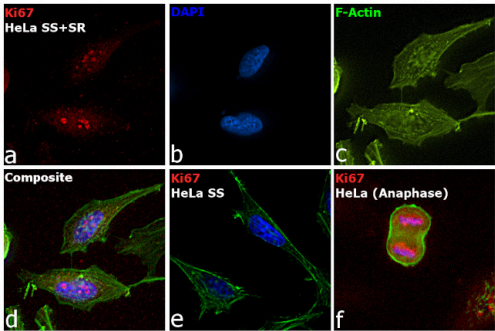
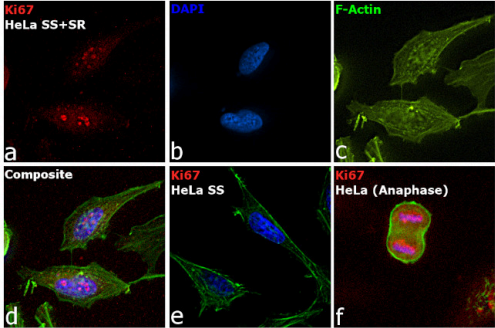
Excitation: 595 nm; Emission: 615 nm.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For Ki-67 Monoclonal Antibody (20Raj1), eFluor™ 615, eBioscience™

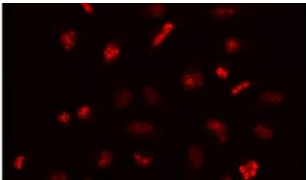
Ki-67 Antibody (42-5699-82) in ICC/IF

Immunofluorescence analysis of Ki-67 Monoclonal Antibody (20Raj1), eFluor™ 615, eBioscience™ was performed using 70% confluent HeLa cells that were serum- starved (SS) for 36 hours followed by serum release (SR) for 6 hours. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with Ki-67 Monoclonal Antibody (20Raj1), eFluor™ 615, eBioscience™; (Product # 42-5699-82) at 1 µg /mL concentration in 0.1% BSA, incubated at 4 degree celsius overnight. (Panel a: Red). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Green) was stained with Alexa Fluor™ Plus 488 Phalloidin (Product # A12379, 1:500 dilution). Panel d represents the merged image showing speckle-like localization in the nucleus. Panel e represents serum-starved HeLa cells (36 hours) having no expression of Ki-67. Panel f represents a mitotic cell among the HeLa control cells showing Ki-67 signal on the chromatin. The images were captured at 60X magnification.



Ki-67 Antibody (42-5699-82)

Detection of induction of the target protein expression by cell treatment demonstrates antibody specificity. Immunofluorescence analysis using Ki-67 Monoclonal Antibody (20Raj1), eFluor™ 615, eBioscience™ (Product # 42-5699-82), shows the expression of Ki-67 in HeLa cells serum starved for 36 hours followed by serum release for 6 hours while no expression was observed in serum-starved HeLa cells (36 hours). {TM}



Ki-67 Antibody (42-5699-82) in ICC/IF

Immunocytochemistry of fixed and permeabilized HeLa cells using 1 µg/mL of Anti-Human Ki-67 eFluor® 615.

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Immunohistochemistry (1)

Stem cells (Dayton, Ohio)	Year 2013
Biliary tree stem cells, precursors to pancreatic committed progenitors: evidence for possible life-long pancreatic organogenesis.	
"Published figure using Ki-67 monoclonal antibody (Product # 42-5699-82) in Immunofluorescence"	
Authors: Wang Y,Lanzoni G,Carpino G,Cui CB,Dominguez-Bendala J,Wauthier E,Cardinale V,Oikawa T,Pileggi A, Gerber D,Furth ME,Alvaro D,Gaudio E,Inverardi L,Reid LM	

Immunocytochemistry (2)

Scientific reports	Year 2017
Core Transcription Factors, MicroRNAs, and Small Molecules Drive Transdifferentiation of Human Fibroblasts Towards The Cardiac Cell Lineage.	
"Published figure using Ki-67 monoclonal antibody (Product # 42-5699-82) in Immunofluorescence"	
Authors: Christoforou N,Chakraborty S,Kirkton RD,Adler AF,Addis RC,Leong KW	

Arteriosclerosis, thrombosis, and vascular biology	Year 2016
S100A6 Regulates Endothelial Cell Cycle Progression by Attenuating Antiproliferative Signal Transducers and Activators of Transcription 1 Signaling.	
"Published figure using Ki-67 monoclonal antibody (Product # 42-5699-82) in Immunocytochemistry"	
Authors: Lerchenmüller C,Heißenberg J,Damilano F,Bezzeridis VJ,Krämer I,Bochaton-Piallat ML,Hirschberg K,Busch M, Katus HA,Peppel K,Rosenzweig A,Busch H,Boerries M,Most P	

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