

Anti-Mouse/Rat Ki-67 PerCP-eFluor® 710

Catalog Number: 46-5698

RUO: For Research Use Only. Not for use in diagnostic procedures.



Description

The monoclonal antibody SolA15 recognizes mouse and rat Ki-67, a 300 kDa nuclear protein. Ki-67 is present during all active phases of the cell cycle (G1, S, G2, and mitosis), but is absent from resting cells (G0). Ki-67 is detected within the nucleus during interphase but redistributes to the chromosomes during mitosis. Ki-67 is used as a marker for determining the growth fraction of a given population of cells. In studies of tumor cells, the "Ki-67 labeling index" refers to the number of Ki-67 positive cells within the population and this is used to predict outcome of particular cancer types. Ki-67 has been shown to interact with the DNA-bound protein chromobox protein homolog 3 (CBX3) (heterochromatin).

The SoIA15 antibody also recognizes human and canine Ki-67.

Applications Reported

This SolA15 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This SolA15 antibody has been tested by intracellular staining and flow cytometric analysis of stimulated mouse splenocytes using the Foxp3 Buffer Set (cat. 00-5521) and protocol. Please see Best Protocols Section (Staining Intracellular Antigens for Flow Cytometry) for staining protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This can be used at less than or equal to 0.06 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to



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freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

Click here or contact eBioscience Technical Support for more information on eFluor™ Organic Dyes including PerCPeFluor® 710.

References

Schaefer JS, Montufar-Solis D, Nakra N, Vigneswaran N, Klein JR. Small intestine inflammation in roquin-mutant and roquin-deficient mice.PLoS One. 2013;8(2):e56436. doi: 10.1371/journal.pone.0056436. (**Sola15**, FC, PubMed)

Starborg M, Gell K, Brundell E, Höög C. The murine Ki-67 cell proliferation antigen accumulates in the nucleolar and heterochromatic regions of interphase cells and at the periphery of the mitotic chromosomes in a process essential for cell cycle progression. J Cell Sci. 1996 Jan;109 (Pt 1):143-53.

Related Products

00-5521 Foxp3 Fixation/Permeabilization Concentrate and Diluent 00-5523 Foxp3 / Transcription Factor Staining Buffer Set 11-0452 Anti-Human/Mouse CD45R (B220) FITC (RA3-6B2) 16-0031 Anti-Mouse CD3e Functional Grade Purified (145-2C11) 46-4321 Rat IgG2a K Isotype Control PerCP-eFluor® 710 (eBR2a)