TECHNICAL DATA SHEET

CyFlow™ Ki-67 Alexa Fluor™ 647
Anti-Hu; Clone Ki-67

REF **AD268830**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	Ki-67
Alternative Names	—
Clone	Ki-67
Clonality	monoclonal
Format	Alexa Fluor™ 647
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Cow
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Nuclei of the Hodgkin lymphoma cell line L428

Specificity

The mouse monoclonal antibody Ki-67 recognizes Ki-67 antigen, a non-histone nuclear protein expressed exclusively in proliferating cells.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

Ki-67 is a highly protease-sensitive nuclear protein expressed in two isoforms (345 kDa and 395 kDa), both of which are identified by the antibody clone Ki-67. The Ki-67 antigen is essential for cell proliferation and its expression is restricted to the cycling cells. It is detected in G1, S, G2 and M phase, whereas it is absent in cells which are in G0 phase and it is not associated with DNA repair processes. Ki-67 thus represents an important tool for detection of proliferating cells, which is of great importance in tumor diagnostics and is commonly used as a prognostic factor in cancer studies.

References

- Gerdes J, Schwab U, Lemke H, Stein H: Production of a mouse monoclonal antibody reactive with a human nuclear antigen associated with cell proliferation. Int J Cancer. 1983 Jan 15; 31(1):13-20. < PMID: 6339421 >
- Gerdes J, Lemke H, Baisch H, Wacker HH, Schwab U, Stein H: Cell cycle analysis of a cell proliferation-associated human nuclear antigen defined by the monoclonal antibody Ki-67. J Immunol. 1984 Oct; 133(4):1710-5. < PMID: 6206131 >
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- Schlüter C, Duchrow M, Wohlenberg C, Becker MH, Key G, Flad HD, Gerdes J: The cell proliferation-associated antigen of antibody Ki-67: a very large, ubiquitous nuclear protein with

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- Duchrow M, Schlüter C, Key G, Kubbutat MH, Wohlenberg C, Flad HD, Gerdes J: Cell proliferation-associated nuclear antigen defined by antibody Ki-67: a new kind of cell-cycle-maintaining proteins. Arch Immunol Ther Exp (Warsz). 1995; 43(2):117-21. < PMID: 8744726 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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