

Technical Data Sheet

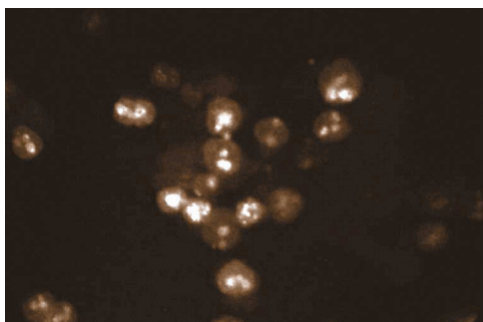
FITC Mouse Anti-Ki-67

Product Information

Material Number:	612472
Size:	50 µg
Concentration:	0.25 mg/ml
Clone:	35/Ki-67
Immunogen:	Human Ki-67 aa. 1547-1742
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human
Target MW:	395 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Cellular proliferation is a complex multi-faceted process, central to biological events ranging from embryonic development to wound healing. Although proliferation is tightly controlled, dysregulation often results in tumorigenesis. The regulatory process involves the expression of many cell-cycle-associated proteins that are subject to cycle-dependent modification. Such protein expression may be monitored to assess the proliferative capacity of cells, especially tumorigenic cells. The Ki-67 antigen is a nuclear protein expressed exclusively in proliferating cells during all active parts of the cell cycle. However, it is absent in quiescent cells and during DNA repair. The distribution of Ki-67 changes during different stages of the cell cycle. During G1, it is localized to the perinuclear region, but is primarily found in the nuclear matrix in later phases. During mitosis, it associates with the condensed chromosomes. The nuclear localization of Ki-67 and strict association with the cell cycle indicate its importance in the regulation of cell division. Therefore, Ki-67 has become an important marker of proliferating cells, and may also be a marker for distinct nuclear matrix compartments.



PSFK-1

Preparation and Storage

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed. Store undiluted at -20°C.

Application Notes

Application

Immunofluorescence	Tested During Development
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Schluter C, Duchrow M, Wohlenberg C, et al. The cell proliferation-associated antigen of antibody Ki-67: a very large, ubiquitous nuclear protein with numerous repeated elements, representing a new kind of cell cycle-maintaining proteins. *J Cell Biol.* 1993; 123(3):513-522.(Biology)
 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; 109(1):143-153.(Biology)

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