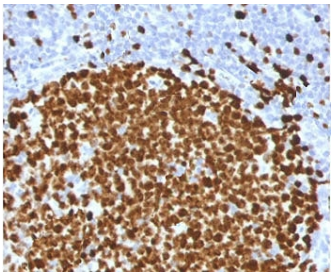
Ki-67 Antibody Fluorescence Imaging / Ki67 IF Antibody [clone PMKI67-1] (V3871)

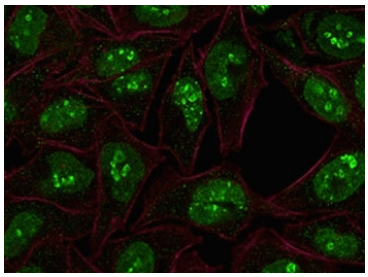
Catalog No.	Formulation	Size
V3871-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3871-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3871SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

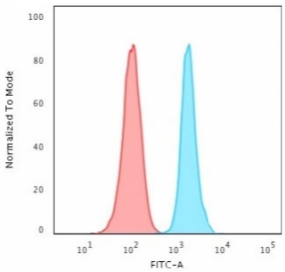
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	PMKI67-1
Purity	Protein G affinity chromatography
UniProt	P46013
Localization	Nuclear
Applications	Flow Cytometry : 1-2ug/10^6 cells in 0.1ml Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Ki67 antibody is available for research use only.



IHC testing of FFPE human tonsil stained with Ki67 antibody (clone PMKI67-1). Required HIER: boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



Ki-67 Antibody Fluorescence Imaging / Ki67 IF Antibody (clone PMKI67-1). Immunofluorescence analysis of human HeLa cells using Ki-67 antibody fluorescence imaging (clone PMKI67-1). Distinct nuclear fluorescence signal (green) is observed in proliferating cells, consistent with the known nuclear localization of Ki-67 / MKI67 during active phases of the cell cycle. Ki-67 signal appears as punctate nuclear fluorescence typical of proliferating cells visualized by high-resolution fluorescence microscopy. Cell boundaries and cytoskeletal structure are highlighted using Phalloidin membrane stain (red), enabling multicolor fluorescence imaging and clear visualization of subcellular localization patterns.



FACS testing of human HeLa cells with Ki67 antibody (blue, clone PMKI67-1) and isotype control (red). Cells were trypsinized and 2-4% PFA-fixed prior to staining.

Description

Ki-67 antigen (MKI67) is a nuclear proliferation-associated protein encoded by the MKI67 gene and is widely used as a marker of actively cycling cells. Ki-67 Antibody Fluorescence Imaging / Ki67 IF Antibody (clone PMKI67-1) enables visualization of proliferating cells using fluorescence imaging approaches that support high-resolution microscopy and subcellular localization analysis of Ki-67 within the nucleus. Fluorescence imaging with Ki-67 antibodies allows investigators to identify proliferating cells while examining nuclear architecture and cellular morphology in the same field of view.

Ki-67 antibody, also referred to as Ki67 antibody or MKI67 antibody in the literature, recognizes a nuclear protein that is present during the G1, S, G2, and mitotic phases of the cell cycle but absent in quiescent G0 cells. Because Ki-67 expression correlates closely with cellular proliferation, fluorescence imaging using Ki-67 antibodies is widely used to visualize proliferating cells in cultured cell models and tissue samples using fluorescence microscopy.

Ki-67 Antibody Fluorescence Imaging produces characteristic nuclear fluorescence patterns that reflect the subcellular distribution of Ki-67 during different phases of the cell cycle. During interphase, Ki-67 localizes within the nucleolus and surrounding nuclear regions, often appearing as punctate fluorescence signals. As cells enter mitosis, Ki-67 redistributes to perichromosomal regions surrounding condensed chromosomes, creating distinctive fluorescence patterns that can be visualized using high-resolution fluorescence microscopy.

High-resolution fluorescence imaging with Ki-67 antibodies allows researchers to examine subcellular localization of Ki-67 in relation to chromatin organization and nuclear structure. Using appropriate fluorescence microscopy systems, Ki-67 positive nuclei can be visualized at high spatial resolution, enabling detailed imaging of nuclear protein distribution and cell cycle-dependent localization patterns. These imaging approaches are particularly useful when studying proliferative cell populations in cell biology and cancer research.

Ki-67 Antibody Fluorescence Imaging can also be incorporated into multicolor fluorescence microscopy experiments. In such studies, Ki-67 nuclear fluorescence can be visualized together with cytoskeletal markers, membrane stains, or nuclear dyes, enabling simultaneous observation of cell morphology, nuclear organization, and proliferative status. Through high-resolution fluorescence microscopy and subcellular localization analysis, Ki-67 Antibody Fluorescence Imaging (clone PMKI67-1) supports detailed imaging of proliferating cells using fluorescence-based experimental workflows.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Ki-67 Antibody Fluorescence Imaging may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 2293-2478 was used as the immunogen for the Ki67 antibody.

Storage

Store the Ki67 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Ki67 antibody, MKI67 antibody, Antigen KI-67 antibody, Ki-67 proliferation marker antibody, Nuclear proliferation antigen Ki-67 antibody

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