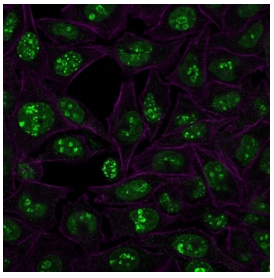
Ki-67 Antibody for IF / Ki67 IF Antibody [clone MKI67/2466] (V7432)

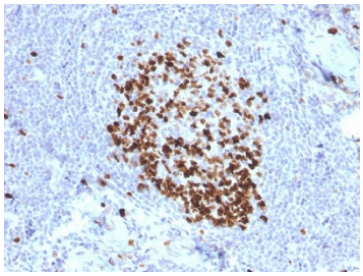
Catalog No.	Formulation	Size
V7432-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7432-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7432SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7432IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

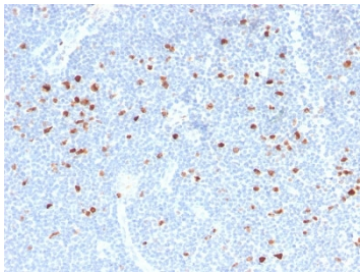
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	MKI67/2466
Purity	Protein G affinity chromatography
UniProt	P46013
Localization	Nuclear
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Ki-67 antibody is available for research use only.



Ki-67 Antibody for IF (clone MKI67/2466) immunofluorescence staining of human HeLa cells. Human HeLa cells were stained with Ki-67 Antibody for IF (clone MKI67/2466). Green fluorescence highlights nuclear Ki-67 / MKI67 expression in proliferating cells, showing the characteristic punctate nuclear staining pattern associated with this cell cycleâ€“regulated proliferation marker. Cell boundaries and actin-rich structures are visualized with Phalloidin (red-purple), allowing clear visualization of cellular morphology and confirming nuclear localization of the Ki-67 signal in actively cycling cells.



IHC testing of FFPE human tonsil stained with Ki-67 antibody (MKI67/2466). Required HIER: boiling tissue sections in 10mM citrate buffer, pH6, for 10-20 min followed by cooling at RT for 20 min.



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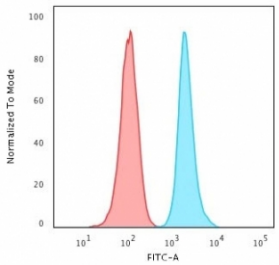
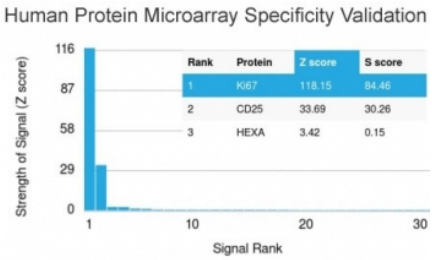
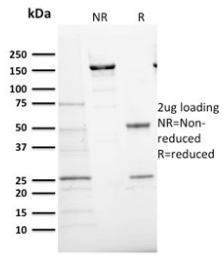


FACS testing of human HeLa cells with Ki-67 antibody (blue, clone MKI67/2466) and isotype control (red). Cells were trypsinized and 2-4% PFA-fixed prior to staining.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Ki-67 antibody (clone MKI67/2466). These results demonstrate the foremost specificity of the MKI67/2466 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Ki-67 Antibody for IF (clone MKI67/2466) as confirmation of integrity and purity.

Description

Ki-67 antigen (MKI67) is a nuclear protein encoded by the MKI67 gene and is widely recognized as a marker of cellular proliferation. Ki-67 Antibody for IF / Ki67 IF Antibody (clone MKI67/2466) enables visualization of this proliferation-associated protein using immunofluorescence microscopy, allowing researchers to detect actively cycling cells within cultured cell populations and tissue specimens at single-cell resolution.

Ki-67 antibody, also referred to as Ki67 antibody or MKI67 antibody in the literature, detects a protein that localizes predominantly to the nucleus during active phases of the cell cycle. Ki-67 expression is present during G1, S, G2, and mitosis but is largely absent in resting G0 cells. Because of this cell cycle-dependent expression pattern, immunofluorescence staining with Ki-67 antibodies provides a reliable method for identifying proliferating cells in fluorescence microscopy experiments.

Ki-67 Antibody for IF allows fluorescent labeling of the Ki-67 protein within individual nuclei, producing characteristic punctate or speckled nuclear fluorescence in proliferating cells. This punctate pattern reflects the association of Ki-67 with nucleolar structures and chromatin throughout the cell cycle. Under fluorescence microscopy, Ki-67 positive nuclei appear as bright nuclear foci within proliferating cells, while non-cycling cells show little to no detectable fluorescence signal.

Immunofluorescence approaches provide high-resolution visualization of Ki-67 localization and are particularly useful for analyzing proliferative cell populations in cultured cells and experimental models. Ki-67 Antibody for IF can be combined with nuclear stains such as DAPI or with cytoskeletal markers including phalloidin or tubulin antibodies in multicolor imaging experiments. These fluorescence imaging approaches allow researchers to correlate nuclear morphology, cytoskeletal organization, and proliferative activity within the same microscopic field.

The Ki-67 protein itself plays roles in chromatin organization and mitotic chromosome architecture during cell division, and its nuclear distribution changes dynamically during different phases of the cell cycle. These biological features contribute to the distinctive fluorescence staining patterns observed in Ki-67 immunofluorescence experiments. Ki-67 Antibody for IF (clone MKI67/2466) is a mouse monoclonal antibody designed for fluorescence-based visualization of Ki-67 / MKI67 in studies of cell proliferation, tumor biology, and cellular growth dynamics.

Application Notes

Optimal dilution of the Ki-67 Antibody for IF should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A portion of amino acids 2293-2478 was used as the immunogen for the Ki-67 antibody.

Storage

Store the Ki-67 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