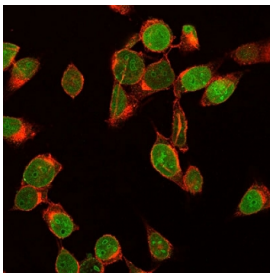
Ki-67 Antibody for Immunofluorescence / Ki67 Antibody [clone MKI67/2461] (V7434)

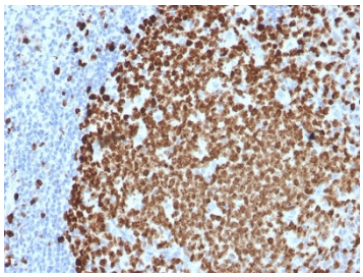
Catalog No.	Formulation	Size
V7434-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7434-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7434SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7434IHC-7ML	Prediluted 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

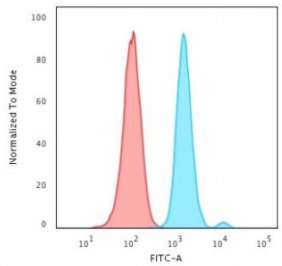
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	MKI67/2461
Purity	Protein G affinity chromatography
UniProt	P46013
Localization	Nuclear
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Ki67 antibody is available for research use only.



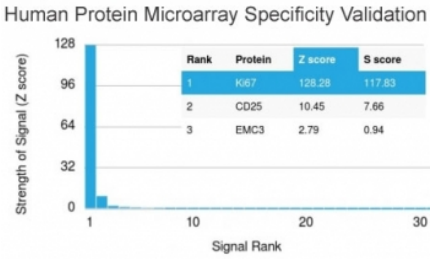
Ki-67 Antibody for Immunofluorescence / Ki67 Antibody (clone MKI67/2461). Immunofluorescence analysis of human HeLa cells using Ki-67 antibody for immunofluorescence (clone MKI67/2461). Strong nuclear fluorescence (green) is observed in proliferating cells, consistent with the known nuclear localization of Ki-67 / MKI67 during active phases of the cell cycle. The surrounding cell boundaries are visualized using wheat germ agglutinin membrane stain (red), enabling clear visualization of cellular morphology and facilitating multicolor immunofluorescence analysis of proliferating cells.



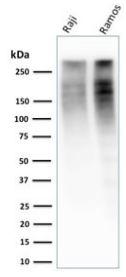
IHC testing of FFPE human tonsil stained with Ki67 antibody (MKI67/2461). Required HIER: boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



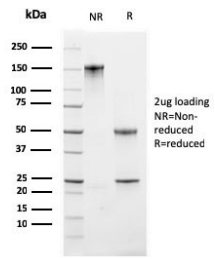
FACS testing of human HeLa cells with Ki67 antibody (blue, clone MKI67/2461) and isotype control (red). Cells were trypsinized and 2-4% PFA-fixed prior to staining.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Ki67 antibody (clone MKI67/2461). These results demonstrate the foremost specificity of the MKI67/2461 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.



Western blot testing of human Raji and Ramos cell lysate with Ki67 antibody (clone MKI67/2461). Predicted molecular weight ~350 kDa.



SDS-PAGE analysis of purified, BSA-free Ki-67 Antibody for Immunofluorescence (clone MKI67/2461) as confirmation of integrity and purity.

Description

Ki-67 antigen (MKI67) is a nuclear protein encoded by the MKI67 gene and is widely used as a marker of cellular proliferation. Ki-67 Antibody for Immunofluorescence / Ki67 Antibody (clone MKI67/2461) enables fluorescence microscopy detection of this proliferation-associated protein, allowing researchers to visualize actively cycling cells in cultured cell systems and tissue samples using immunofluorescence imaging approaches.

Ki-67 antibody, also referred to as Ki67 antibody or MKI67 antibody in the literature, detects a protein that localizes predominantly within the nucleus during active phases of the cell cycle. Ki-67 expression occurs during G1, S, G2, and mitotic phases but is largely absent in resting G0 cells. Because of this tightly regulated cell cycle expression, immunofluorescence labeling with Ki-67 antibodies provides a reliable method for identifying proliferating cells within heterogeneous cell populations.

Ki-67 Antibody for Immunofluorescence produces characteristic nuclear fluorescence patterns in proliferating cells, typically appearing as punctate or speckled nuclear signal that reflects association of Ki-67 with nucleolar structures and chromatin during the cell cycle. These fluorescence patterns allow Ki-67 positive nuclei to be readily distinguished from non-proliferating cells when visualized by fluorescence microscopy.

Immunofluorescence techniques also allow Ki-67 staining to be integrated into multicolor imaging experiments. Ki-67 Antibody for Immunofluorescence can be combined with additional fluorescent antibodies targeting cytoskeletal proteins, membrane markers, or lineage-specific proteins to perform co-localization studies within the same cells. In these multicolor IF experiments, nuclear Ki-67 fluorescence can be visualized simultaneously with markers such as tubulin, actin, or cell surface proteins, allowing researchers to examine relationships between cellular architecture and proliferative activity.

Co-staining with nuclear dyes such as DAPI or other fluorescent nuclear stains further enhances interpretation of Ki-67 immunofluorescence images by clearly defining nuclear morphology and cell cycleÃ¢Â€Â“associated nuclear organization. These multicolor fluorescence imaging approaches allow investigators to correlate Ki-67 positive nuclei with additional cellular features, supporting detailed analysis of proliferative cell populations in cell biology and cancer research studies. Ki-67 Antibody for Immunofluorescence (clone MKI67/2461) therefore supports fluorescence-based visualization and co-localization analysis of the Ki-67 / MKI67 proliferation marker in multicolor immunofluorescence experiments.

Application Notes

Optimal dilution of the Ki-67 Antibody for Immunofluorescence 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 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