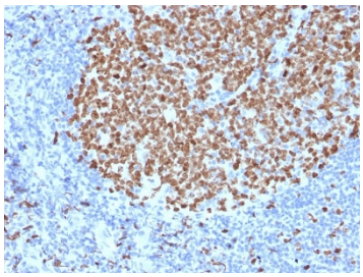
Ki-67 Antibody Western Blot / MKI67 Western Blot Antibody [clone MKI67/2463] (V7435)

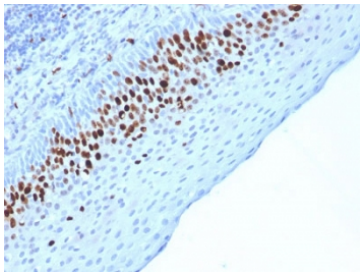
Catalog No.	Formulation	Size
V7435-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7435-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7435SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7435IHC-7ML	Prediluted 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

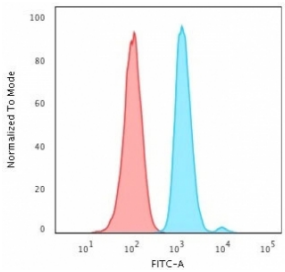
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	MKI67/2463
Purity	Protein G affinity chromatography
UniProt	P46013
Localization	Nuclear
Applications	Western blot: 1-2ug/ml Flow cytometry: 1-2ug/10^6 cells Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Ki67 antibody is available for research use only.



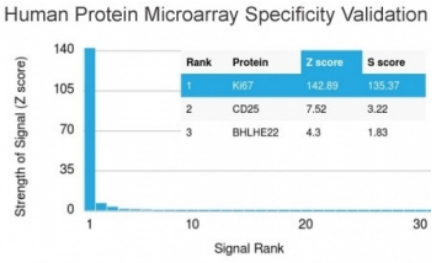
IHC testing of FFPE human tonsil stained with Ki67 antibody (MKI67/2463). Required HIER: boiling tissue sections in 10mM citrate buffer, pH6, for 10-20 min followed by cooling at RT for 20 min.



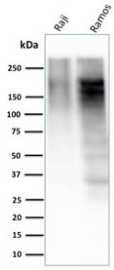
IHC testing of FFPE human skin stained with Ki67 antibody (MKI67/2463). Required HIER: boiling tissue sections in 10mM citrate buffer, pH6, for 10-20 min followed by cooling at RT for 20 min.



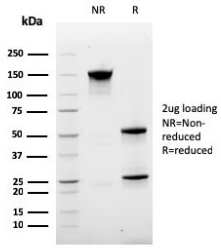
FACS testing of human HeLa cells with Ki67 antibody (blue, clone MKI67/2463) and isotype control (red). Cells were trypsinized and 2-4% PFA-fixed prior to staining.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Ki67 antibody (clone MKI67/2463). These results demonstrate the foremost specificity of the MKI67/2463 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 Ki-67 Antibody Western Blot (clone MKI67/2463). Expected molecular weight ~350 kDa.



SDS-PAGE analysis of purified, BSA-free Ki-67 Antibody for Western Blot (clone MKI67/2463) as confirmation of integrity and purity.

Description

Ki-67 antigen (MKI67) is a nuclear proliferation-associated protein encoded by the MKI67 gene and widely used as a marker of actively cycling cells. Ki-67 Antibody Western Blot / MKI67 Western Blot Antibody (clone MKI67/2463) supports detection of the Ki-67 protein by western blot, enabling researchers to examine proliferation-associated protein expression in cultured cells and tissue lysates. Western blot analysis of Ki-67 is commonly used to compare proliferative activity across experimental conditions, cancer cell lines, and treatments that influence cell cycle progression.

Ki-67 antibody, also referred to as Ki67 antibody or MKI67 antibody in the literature, recognizes a large nuclear protein expressed during the G1, S, G2, and mitotic phases of the cell cycle but largely absent in quiescent G0 cells. Because Ki-67 expression correlates closely with cellular proliferation, detection of Ki-67 protein by western blot provides a biochemical method for evaluating proliferative status in cell populations. Ki-67 protein levels detected by western blot often increase in rapidly dividing cells, including many tumor-derived cell lines.

The Ki-67 protein is unusually large and displays complex electrophoretic migration during SDS-PAGE analysis. The predicted molecular weight of Ki-67 is approximately 320-360 kDa depending on isoform, and western blot analysis frequently reveals broad or multiple high molecular weight bands in this region. These banding patterns reflect extensive phosphorylation and other post-translational modifications that occur as Ki-67 participates in chromatin organization and mitotic chromosome architecture during the cell cycle.

Because of these biochemical properties, Ki-67 western blot signals often appear as diffuse or doublet bands at high molecular weight rather than a single sharp band. Such migration behavior is well documented for Ki-67 and is consistent with the dynamic phosphorylation state of this proliferation-associated protein during different stages of the cell cycle.

Ki-67 Antibody Western Blot / MKI67 Western Blot Antibody (clone MKI67/2463) is a mouse monoclonal antibody developed to detect the Ki-67 / MKI67 proliferation marker in western blot assays. This antibody supports analysis of Ki-67 protein expression in studies of cell proliferation, tumor biology, and cell cycle regulation using biochemical detection methods.

Application Notes

Optimal dilution of the Ki-67 Antibody Western Blot 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

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