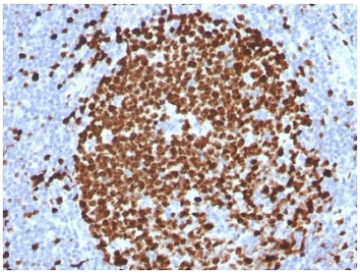
Ki-67 Antibody - Protein Microarray Validated / MKI67 Microarray Validated Antibody [clone MKI67/2465] (V3866)

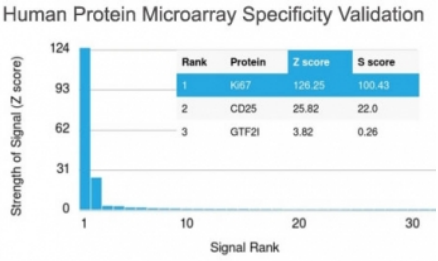
Catalog No.	Formulation	Size
V3866-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3866-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3866SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

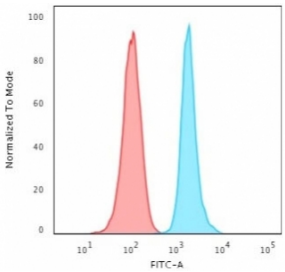
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	MKI67/2465
Purity	Protein G affinity chromatography
UniProt	P46013
Localization	Nuclear
Applications	Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Ki-67 antibody is available for research use only.



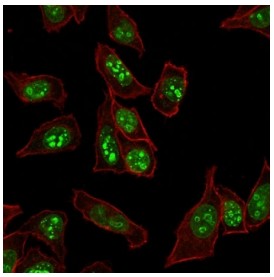
Ki-67 Antibody - Protein Microarray Validated / MKI67 Microarray Validated Antibody (clone MKI67/2465). Immunohistochemistry analysis of FFPE human tonsil tissue using protein microarray validated Ki-67 antibody (clone MKI67/2465). Strong nuclear brown staining is observed in numerous proliferating lymphoid cells within the tonsillar germinal center, consistent with the known expression pattern of Ki-67 / MKI67 in actively dividing cells. The microarray validated antibody highlights proliferating lymphocytes while surrounding non-proliferating stromal and background cells show minimal staining. Heat-induced epitope retrieval was performed by boiling tissue sections in 10mM citrate buffer (pH6) for 10-20 minutes followed by cooling at room temperature prior to staining.



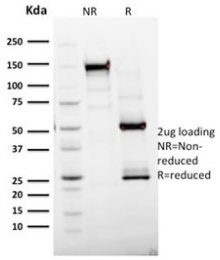
Ki-67 Antibody - Protein Microarray Validated / MKI67 Microarray Validated Antibody (clone MKI67/2465). Protein microarray specificity validation of Ki-67 antibody - Protein Microarray Validated (clone MKI67/2465). Analysis was performed using the HuProt(TM) human protein microarray containing more than 19,000 full-length human proteins. The antibody demonstrates strongest binding to Ki-67 / MKI67, which ranks first among all proteins on the array, supporting high target specificity. Signal strength is quantified using Z-score and S-score metrics, where the Z-score represents the relative strength of antibody binding compared to the mean signal across the array and the S-score represents the difference between the top-ranked protein signal and the next strongest signals. The high Z-score and S-score values observed for Ki-67 indicate strong preferential recognition of the intended MKI67 target with limited cross-reactivity to other proteins present on the array.



FACS testing of human HeLa cells with Ki-67 antibody (blue, clone MKI67/2465) and isotype control (red). Cells were trypsinized and 2-4% PFA-fixed prior to staining.



Immunofluorescent staining of human HeLa cells with microarray validated Ki-67 antibody (green, clone MKI67/2465) and Phalloidin (red, membrane stain).



SDS-PAGE analysis of purified, BSA-free Ki-67 antibody (clone MKI67/2465) 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 - Protein Microarray Validated / MKI67 Microarray Validated Antibody (clone MKI67/2465) has undergone protein microarray-based validation, providing researchers with specificity data generated from large-scale proteome screening experiments. Protein microarray validation represents a powerful approach for assessing antibody specificity against thousands of proteins simultaneously.

Ki-67 antibody, also referred to as Ki67 antibody or MKI67 antibody in the literature, detects a 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, antibodies targeting Ki-67 are widely used in studies of tumor biology, cell cycle regulation, and proliferative cell populations. Reliable antibody specificity is particularly important when detecting nuclear proteins that are broadly expressed across proliferating cells.

Protein microarray validation enables evaluation of antibody binding across a large collection of recombinant human proteins printed on a microarray surface. In these assays, the antibody is incubated with the protein array and binding signals are measured using fluorescence-based detection systems. This screening approach allows investigators to determine whether the antibody preferentially recognizes its intended target protein while minimizing cross-reactivity with unrelated proteins present on the array.

For Ki-67 Antibody - Protein Microarray Validated (clone MKI67/2465), microarray analysis provides evidence of target specificity through comparison of signal intensity across thousands of proteins present on the array. Metrics such as Z-scores and S-scores are commonly used to quantify binding strength and relative specificity. The Z-score reflects the strength of the antibody binding signal relative to the distribution of signals detected across the array, while the S-score measures the difference in signal strength between the top-ranked protein target and the next strongest signals. High Z-score and S-score values support strong target recognition and limited cross-reactivity.

Because protein microarray validation evaluates antibody performance against a broad range of proteins simultaneously, this method provides an additional layer of confidence in antibody specificity. Ki-67 Antibody - Protein Microarray Validated (clone MKI67/2465) therefore supports studies of cell proliferation and Ki-67 / MKI67 expression while incorporating microarray-based specificity validation data generated from large-scale proteome screening experiments.

Application Notes

Optimal dilution of the Ki-67 Antibody - Protein Microarray Validated should be determined by the researcher.

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

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