36-2775: Anti-Ki-67 (Proliferating Cell Marker) Monoclonal Antibody(Clone: MKI67/2466)<br>Clonality :<br>Clone Name :<br>Application :<br>Reactivity :<br>\section*{Gene:}<br>Gene ID :<br>Uniprot ID :<br>Alternative Name:<br>Isotype :<br>Immunogen Information :<br>Monoclonal<br>MKI67/2466<br>FACS,IHC<br>Human<br>MKI67<br>4288<br>P46013<br>KI-67; Ki67; KI-67 Antigen (KIA); MKI67; Proliferation related Ki-67 antigen<br>Mouse IgG2b, kappa<br>Recombinant fragment of human Ki67 protein (around aa 2293-2478) (exact sequence is proprietary)

## Description

Ki-67 antigen is a nuclear, non-histone protein that is present in all stages of the cell cycle except G0. This characteristic makes $\mathrm{Ki}-67$ an excellent marker for proliferating cells and is commonly used as one of the prognostic factors in cancer studies. A correlation has been demonstrated between Ki-67 index and the histo-pathological grade of neoplasms. Assessment of $\mathrm{Ki}-67$ expression in renal and ureter tumors shows a correlation between tumor proliferation and disease progression, thus making it possible to differentiate high-risk patients. Ki-67 expression may also prove to be important for distinguishing between malignant and benign peripheral nerve sheath tumors. Ki-67 labeling index has been shown to be a prognostic marker in a number of neoplasms including grade II astrocytoma, oligodendroglioma, colon carcinoma, and breast carcinoma. In general, Ki-67 is a good marker of proliferating cell populations.

## Product Info

Amount :
Content:

## Storage condition :

$20 \mu \mathrm{~g} / 100 \mu \mathrm{~g}$
$200 \mu \mathrm{~g} / \mathrm{ml}$ of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10 mM PBS with $0.05 \%$ BSA \& $0.05 \%$ azide. Also available WITHOUT BSA \& azide at $1.0 \mathrm{mg} / \mathrm{ml}$.
Antibody with azide - store at 2 to $8^{\circ} \mathrm{C}$. Antibody without azide - store at -20 to $-80^{\circ} \mathrm{C}$. Antibody is stable for 24 months. Non-hazardous.

## Application Note

Flow Cytometry (1-2ug/million cells); (Immunofluorescence (1-2ug/ml);Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0 , for 45 min at $95 \& \mathrm{deg}$ C followed by cooling at RT for 20 minutes);


Fig. 1: Formalin-fixed, paraffin-embedded human Tonsil stained with Ki67 Mouse Monoclonal Antibody (MKI67/2466).


Fig. 2: Confocal Immunofluorescence image of HeLa cells using Ki67 Mouse Monoclonal Antibody (MKI67/2466) Green (CF488) and Phalloidin (Purple) is used to label the membranes

Fig. 3: SDS-PAGE Analysis Purified Ki67 Mouse Monoclonal Antibody (MKI67/2466). Confirmation of Purity and Integrity of Antibody.

Fig. 4: Flow Cytometric Analysis of HeLa cells using Ki67 Mouse Monoclonal Antibody (MKI67/2466). Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

Fig. 5: Analysis of Protein Array containing more than 19,000 full-length human proteins using Ki67 Mouse Monoclonal Antibody (MKI67/2466). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-lgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S -score is the difference (also in units of SD's) between the Z -score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein $X$ with a $Z$-score of 43 and to protein $Y$ with a $Z$-score of 14 , then the S -score for the binding of that MAb to protein X is equal to 29.

