

Mouse anti-Human Ki67/MKI67 Monoclonal Antibody | anti-MKI67 antibody

Anti-Ki67/MKI67 Antibody, Mouse Monoclonal

CATALOG # AAA255651	HOST Mouse	REACTIVITY Human	APPLICATIONS Immunofluorescence, Immunocytochemistry, Western Blot
-------------------------------	----------------------	----------------------------	--

PRODUCT SYNONYMS

Ki67/MKI67; Monoclonal Antibody; Anti-Ki67/MKI67 Antibody; Mouse Monoclonal; MKI67 Antibody; Mouse MAb; marker of proliferation Ki-67; Anti-KiA Antibody; Anti-MIB-Antibody; Anti-MIB-1 Antibody; Anti-PPP1R105 Antibody; anti-MKI67 antibody

PRODUCT SPECIFICATIONS

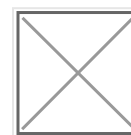
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	01
Specificity	Human MKI67
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-MKI67 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	Recombinant Human MKI67 protein
Conjugation	Unconjugated
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human MKI67 (rh MKI67). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



WB (Western Blot)

Anti-MKI67 mouse monoclonal antibody at 1:500 dilution Lane A: K562 Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Mouse IgG H&L (Dylight800) at 1/15000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 358 kDa Observed band size: 358 kDa



IF (Immunofluorescence)

Immunofluorescence staining of Human MKI67 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with mouse anti-Human MKI67 monoclonal antibody (1:300) at 37 degree C 1 hour. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to nucleus.

ADDITIONAL INFORMATION

Related Product Information for anti-MKI67 antibody	MKI67 contains 1 FHA domain and plays a key role in cell proliferation. During interphase, the MKI67 antigen can be exclusively detected within the cell nucleus, whereas in mitosis most of the protein is relocated to the surface of the chromosomes. MKI67 protein is present during all active phases of the cell cycle (G1, S, G2, and mitosis), but is absent from resting cells. MKI67 is an excellent marker to determine the growth fraction of a given cell population. The fraction of MKI67-positive tumor cells is often correlated with the clinical course of cancer. It is also associated with ribosomal RNA transcription. Inactivation of antigen MKI67 leads to inhibition of ribosomal RNA synthesis. The MKI67 protein is a nuclear and nucleolar protein, which is tightly associated with somatic cell proliferation. Antibodies raised against the human MKI67 protein paved the way for the immunohistological assessment of cell proliferation, particularly useful in numerous studies on the prognostic value of cell growth in clinical samples of human neoplasms. MKI67 protein expression is an absolute requirement for progression through the cell-division cycle. Recently, MKI67 is proved to be an independent prognostic factor for disease-free survival (HR 1.5-1.72) in multivariate analyses studies using samples from randomized clinical trials with secondary central analysis of the biomarker. MKI67 was not found to be predictive for long-term follow-up after chemotherapy. Nevertheless, high Ki-67 was found to be associated with immediate pathological complete response in the neoadjuvant setting, with an LOE of II-B. MKI67 could be considered as a prognostic biomarker for therapeutic decision.
References	Rahmanzadeh R, et al. (2007) Chromophore-assisted light inactivation of pKi-67 leads to inhibition of ribosomal RNA synthesis. Cell Prolif. 40(3):422-30. Bullwinkel J, et al. (2006) Ki-67 protein is associated with ribosomal RNA transcription in quiescent and proliferating cells. J Cell Physiol. 206(3):624-35. Schonk DM, et al. (1989) Assignment of the gene(s) involved in the expression of the proliferation-related Ki-67 antigen to human chromosome 10. Hum Genet. 83(3):297-9. Endl E, et al., 2000, Exp Cell Res. Jun 15;257(2): 231-7.Luporsi E, et al., 2012, Breast Cancer Res Treat. 132(3): 895-915.Scholzen T, et al., 2000, J Cell Physiol. 182(3): 311-22.

NCBI AND UNIPROT INFORMATION

NCBI GI #	225543215
NCBI GeneID	4288
NCBI Accession #	NP_001139438.1
NCBI GenBank Nucleotide #	NM_001145966.1
UniProt Accession #	P46013; Q5VWH2
Molecular Weight	358,694 Da
NCBI Official Full Name	antigen Ki-67 isoform 2
NCBI Official Synonym Full Names	antigen identified by monoclonal antibody Ki-67
NCBI Official Symbol	MKI67
NCBI Official Synonym Symbols	KIA
NCBI Protein Information	antigen Ki-67; proliferation-related Ki-67 antigen
UniProt Protein Name	Antigen Ki-67
UniProt Gene Name	MKI67
UniProt Entry Name	KI67_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.