

Rabbit Polyclonal Anti-Ki67 antibody

Catalog Number: KI67-101AP

Lot Number:

General Information

Product	Ki67 Antibody
Accession #	Uniprot: P46013 NCBI: NP_002408.3
Verified Applications	ELISA, IP, WB
Species Cross Reactivity	Human, Monkey
Host	Rabbit
Immunogen	Synthetic peptide taken within amino acid region 1250-1300 on human antigen Ki67 isoform 1.
Specificity	This antibody will detect both isoform 1 and isoform 2 in human.
Alternative Nomenclature	Antigen identified by monoclonal antibody, Ki 67 antibody, Antigen KI-67 antibody, KIA antibody, MKI67 antibody, Proliferation related Ki 67 antigen antibody, RP11-380J17.2 antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.5 mg/ml IgG in antibody stabilization buffer
Determinant	Mid-region
Storage	Store at -20°C for long term storage.

Recommended Dilutions

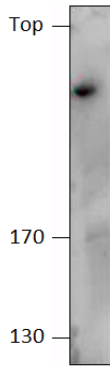
DOT Blot	1:10,000
ELISA	1:10,000
Immunoprecipitation	1:200
Western Blot	1:500

Related Products

Catalog

BIOTIN-Conjugated	KI67-BIOTIN
FITC-Conjugated	KI67-FITC
Antigenic Blocking Peptide	P-KI67
Western Blot Positive Control	PC-KI67

Application Verification:



WB of KI67-101AP with TD47D cells. 1:500 antibody dilution in DiluObuffer. Apparent MW is approximately 400 kDa.

Dilutions are for reference only. Applications not listed above are not necessarily precluded from working with this antibody. Investigators intending to use an application that has not been verified can request a complimentary sample.

Overview:

Ki-67 is a marker of cell proliferation and is detected in cells that are in G1-, S-, G2-, and M-phase of the cell cycle and absent in cells in G0 phase (1). Ki-67 is used as a marker for cell proliferation of solid tumors and some hematological malignancies. It is associated with ribosomal RNA transcription, and inactivation of antigen Ki-67 leads to inhibition of ribosomal RNA synthesis. Ki-67 expression is used as a marker for determining the fraction of proliferating cells within a given population of tumor cells. It is also important for distinguishing between malignant and benign peripheral nerve sheath tumors. Ki-67 is used as prognostic/predictive markers in breast cancer and other malignant diseases, so high levels of Ki-67 are associated with poorer breast cancer survival (2). Ki-67 protein is a new member of the family of MPM-2 reactive phospho-proteins, which includes both structural and functional proteins that are necessary for the control and timing of mitosis. Phosphorylation and dephosphorylation of the Ki-67 protein are controlled by key regulatory structures of the cell cycle and occur at two hallmark events within the cell cycle: the breakdown and the reorganization of the nucleus during mitosis (3). The human Ki67 gene maps to chromosome 10q26.2 and encodes a 3256 amino acid protein.

The KI67 selective antibodies were generated against conserved sequences that are unique to specific KI67 protein. The KI67-selective antibodies are affinity purified against immobilized antigen based affinity chromatography which yielded epitope-specific antibodies. Western blot positive control (PC-KI67) and antigenic blocking peptides (P-KI67) for KI67 are available. Antibodies can be conjugated to fluorophores or other secondary enzymes upon request at nominal cost. For a complete listing of all FabGennix products and lab services, please visit: <http://fabgennix.com>.

References:

1. Scholzen T, van der Sar S, Cowell IG, Gerdes J, Singh P, et al.. The Ki-67 protein interacts with members of the heterochromatin protein 1 (HP1) family: a potential role in the regulation of higher-order chromatin structure. Division of Molecular Immunology, Research Center, Borstel, Germany J Pathol. 2002 Feb;196(2):135-44.
2. Senol EP, Tasdelen I, Adim SB, Ozkaya G, Tolunay S. A comparison of Ki 67 proliferative index in primary tumor and axillary metastatic lymph nodes with length of survival in patients with breast cancer. Bratisl Lek Listy. 2013;114(11):645-9.
3. Endl E, Gerdes J. Posttranslational modifications of the KI-67 protein coincide with two major checkpoints during mitosis. Department of Immunology and Cell Biology, Division of Molecular Immunology, Research Center Borstel, Germany. J Cell Physiol. 2000 Mar;182(3).

For users who may require large amounts of the products listed above, please inquire about bulk material discounts. This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.