

## KI67 Ab

Cat.#: BF0132  
Size: 50ul,100ul,200ul

Concn.: 1mg/ml  
Source: Mouse

Mol.Wt.: 358kDa  
Clonality: Monoclonal

Application:	ELISA 1/10000, IHC 1/200 - 1/1000
Reactivity:	Human
Purification:	Affinity-chromatography.
Specificity:	KI67 Ab detects endogenous levels of total KI67.
Immunogen:	Purified recombinant fragment of human KI67 expressed in E. Coli.
Uniprot:	P46013
Description:	Ki67, also known as MKI67, it is the prototypic cell cycle related nuclear protein, expressed by proliferating cells in all phases of the active cell cycle (G1, S, G2 and M phase). It is absent in resting (G0) cells. Ki67 antibodies are useful in establishing the cell growing fraction in neoplasms (immunohistochemically quantified by determining the number of Ki67 positive cells among the total number of resting cells = Ki67 index). In neoplastic tissues the prognostic value is comparable to the tritiated thymidine labelling index. The correlation between low Ki67 index and histologically low grade tumours is strong. Ki67 is routinely used as a neuronal marker of cell cycling and proliferation.
Subcellular Location:	Chromosome. Nucleus. Nucleus, nucleolus. Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the mitotic chromosome surface (PubMed:27362226). Associates with satellite DNA in G1 phase (PubMed:9510506). Binds tightly to chromatin in interphase, chromatin-binding decreases in mitosis when it associates with the surface of the condensed chromosomes (PubMed:15896774, PubMed:22002106). Predominantly localized in the G1 phase in the perinucleolar region, in the later phases it is also detected throughout the nuclear interior, being predominantly localized in the nuclear matrix (PubMed:22002106).
Tissue Specificity:	Expression occurs preferentially during late G1, S, G2 and M phases of the cell cycle, while in cells in G0 phase the antigen cannot be detected (at protein level) (PubMed:6206131). Present at highest level in G2 phase and during mitosis (at protein level). In interphase, forms fiber-like structures in fibrillar-deficient regions surrounding

nucleoli (PubMed:2674163, PubMed:8799815).

Storage Condition and Buffer:

Mouse IgG1 in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20 °C. Stable for 12 months from date of receipt.

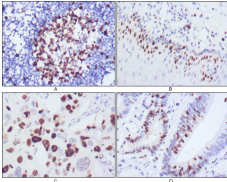


Figure 1: Immunohistochemical analysis of paraffin-embedded human lymph node (A), esophagus (B), lung cancer (C), rectum cancer (D), showing nuclear localization using KI67 mouse mAb with DAB staining.

**IMPORTANT:** For western blot, incubate membrane with diluted primary Ab in 5% w/v milk, 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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