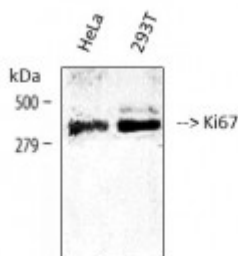


Anti-Ki67 antibody



Western Blot (WB) analysis of HeLa and 293T cell lysates using Ki67 Antibody (STJ93832).



Description

Ki67 is a protein encoded by the MKI67 gene which is approximately 358,6 kDa. Ki67 is localised to the nucleus. It is involved in DNA damage and neuroscience. It is a nuclear protein that is associated with and may be necessary for cellular proliferation. It is required to maintain individual mitotic chromosomes dispersed in the cytoplasm following nuclear envelope disassembly. It also associates with the surface of the mitotic chromosome, the peri-chromosomal layer, and covers a substantial fraction of the chromosome surface. Ki67 is expressed preferentially during late G1, S, G2 and M phases of the cell cycle. Mutations in the MKI67 gene may result in brain ependymoma and amyloplastic carcinoma. STJ93832 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of Ki-67 protein.

Model	STJ93832
Host	Rabbit
Reactivity	Human
Applications	ELISA, IF, IHC
Immunogen	Synthesized peptide derived from human Ki-67
Immunogen Region	3170-3250 aa, C-terminal
Gene ID	4288
Gene Symbol	MKI67
Dilution range	IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000
Specificity	Ki-67 Polyclonal Antibody detects endogenous levels of Ki-67 protein.

Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Proliferation marker protein Ki-67 Antigen identified by monoclonal antibody Ki-67 Antigen KI-67 Antigen Ki67
Molecular Weight	358.694 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:7107OMIM:176741
Alternative Names	Proliferation marker protein Ki-67 Antigen identified by monoclonal antibody Ki-67 Antigen KI-67 Antigen Ki67
Function	Required to maintain individual mitotic chromosomes dispersed in the cytoplasm following nuclear envelope disassembly . Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the chromosome surface . Prevents chromosomes from collapsing into a single chromatin mass by forming a steric and electrostatic charge barrier: the protein has a high net electrical charge and acts as a surfactant, dispersing chromosomes and enabling independent chromosome motility . Binds DNA, with a preference for supercoiled DNA and AT-rich DNA . Does not contribute to the internal structure of mitotic chromosomes . May play a role in chromatin organization . It is however unclear whether it plays a direct role in chromatin organization or whether it is an indirect consequence of its function in maintaining mitotic chromosomes dispersed (Probable).
Cellular Localization	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 . Associates with satellite DNA in G1 phase . Binds tightly to chromatin in interphase, chromatin-binding decreases in mitosis when it associates with the surface of the condensed chromosomes . 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 .
Post-translational Modifications	Phosphorylated. Hyperphosphorylated in mitosis . Hyperphosphorylated form does not bind DNA.