

Ki 67 Monoclonal Antibody(4A8)
Catalog # AP63318**Specification****Ki 67 Monoclonal Antibody(4A8) - Product Information**

Application	IHC
Primary Accession	P46013
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal

Ki 67 Monoclonal Antibody(4A8) - Additional Information**Gene ID** 4288**Other Names**

MKI67; Antigen KI-67

Dilution

IHC~~IHC 1:200 IF 1:50-200

Format

PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.

Storage Conditions

-20°C

Ki 67 Monoclonal Antibody(4A8) - Protein Information**Name** MKI67 ([HGNC:7107](#))**Function**

Required to maintain individual mitotic chromosomes dispersed in the cytoplasm following nuclear envelope disassembly (PubMed: <http://www.uniprot.org/citations/27362226> target="_blank">27362226). Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the chromosome surface (PubMed: <http://www.uniprot.org/citations/27362226> target="_blank">27362226). 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 (PubMed: <http://www.uniprot.org/citations/27362226> target="_blank">27362226). Binds DNA, with a preference for supercoiled DNA and AT-rich DNA (PubMed: <http://www.uniprot.org/citations/10878551> target="_blank">10878551). Does not contribute to the internal structure of mitotic chromosomes (By similarity). May play a role in chromatin organization (PubMed: <http://www.uniprot.org/citations/24867636> target="_blank">24867636). 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 Location

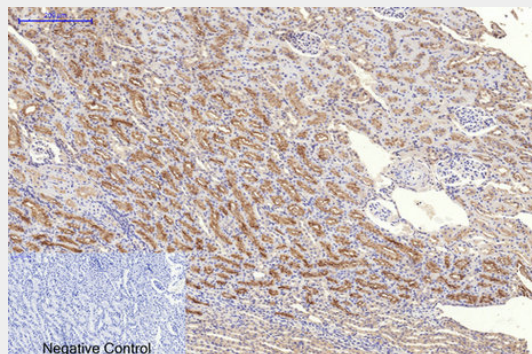
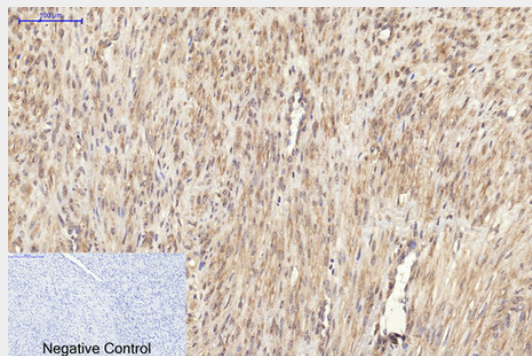
Chromosome. Nucleus. Nucleus, nucleolus Note=Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the mitotic chromosome surface (PubMed:27362226). Associates with satellite DNA in G1 phase (PubMed:9510506). Binds tightly to chromatin 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).

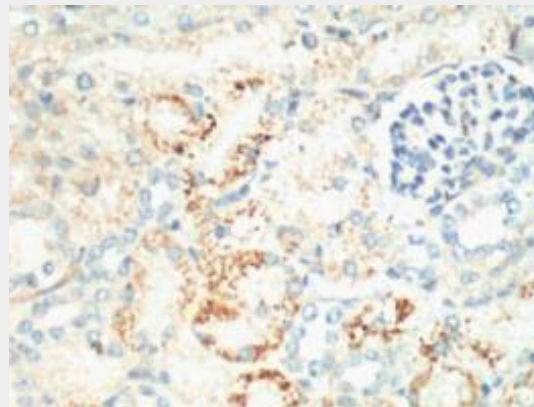
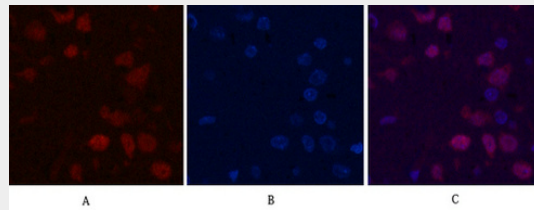
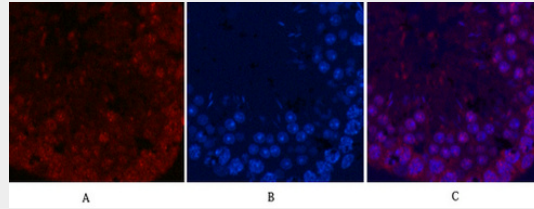
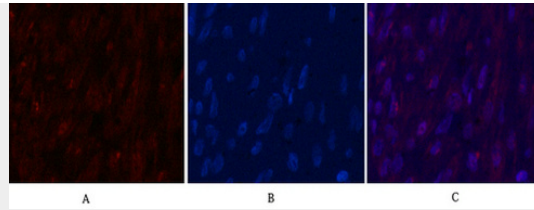
Ki 67 Monoclonal Antibody(4A8) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Ki 67 Monoclonal Antibody(4A8) - Images





Ki 67 Monoclonal Antibody(4A8) - Background

Required to maintain individual mitotic chromosomes dispersed in the cytoplasm following nuclear envelope disassembly (PubMed:27362226). Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the chromosome surface (PubMed:27362226). 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 (PubMed:27362226). Binds DNA, with a preference for supercoiled DNA and AT-rich DNA (PubMed:10878551). Does not contribute to the internal structure of mitotic chromosomes (By similarity). May play a role in chromatin organization (PubMed:24867636). 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).