

## ARG11112 anti-Ki-67 antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Chicken Polyclonal antibody recognizes Ki-67
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Target Name	Ki-67
Species	Human
Immunogen	Mixture of two recombinant Human Ki-67 constructs: aa. 1-300 and aa. 1111-1490.
Conjugation	Un-conjugated
Alternate Names	Antigen KI-67; MIB-; KIA; MIB-1; PPP1R105

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:1000 - 1:5000
	WB	1:5000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

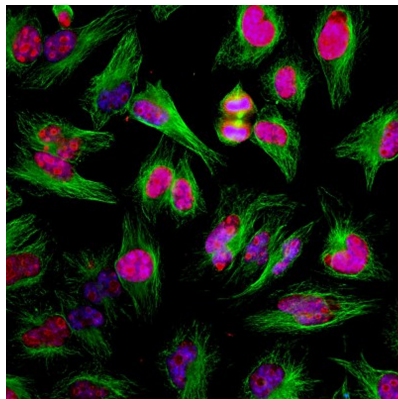
Form	Liquid
Buffer	PBS and 5 mM Sodium azide.
Preservative	5 mM Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Gene Symbol	MKI67
Gene Full Name	marker of proliferation Ki-67

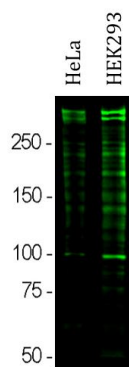
<b>Background</b>	This gene encodes a nuclear protein that is associated with and may be necessary for cellular proliferation. Alternatively spliced transcript variants have been described. A related pseudogene exists on chromosome X. [provided by RefSeq, Mar 2009]
<b>Function</b>	Required to maintain 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). [UniProt]
<b>Calculated Mw</b>	359 kDa
<b>PTM</b>	Phosphorylated. Hyperphosphorylated in mitosis (PubMed:10502411, PubMed:10653604). Hyperphosphorylated form does not bind DNA. [UniProt]
<b>Cellular Localization</b>	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). [UniProt]

## Images



ARG11112 anti-Ki-67 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG11112 anti-Ki-67 antibody (red) at 1:2000 dilution, and co-stained with anti-beta Tubulin antibody (green) at 1:5000 dilution. DAPI (blue) for nuclear staining.



ARG11112 anti-Ki-67 antibody WB image

Western blot: Rapidly dividing HeLa and HEK293 cell cultures. Cell lysates were stained with ARG11112 anti-Ki-67 antibody at 1:5000 dilution.

Strong double bands above 250 kDa correspond to the two major Ki-67 isoforms of molecular weight 345 kDa and 395 kDa. Since Ki-67 is a rather unstable and short half life protein multiple proteolytic fragments of the two isoforms are also detected on the blot.