

Anti-KI67 Rabbit Monoclonal Antibody

Rabbit Monoclonal Antibody Catalog # ABV11829

Specification

Anti-KI67 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW IHC, WB <u>P46013</u> Human, Mouse Rabbit Monoclonal Rabbit IgG 358694

Anti-KI67 Rabbit Monoclonal Antibody - Additional Information

Gene ID 4288

Positive Control

Application & Usage

WB: HeLa and K562 cell lysate; IHC: human breast cancer and tonsil tissue IHC: 1:100 - 1:400 dilution ; WB: 1:100 -1:500 dilution MKI67

Alias Symbol **Other Names** KIA, KI-67, MKI67

Appearance Colorless liquid

Formulation In 50% Glycerol/PBS with 1% BSA and 0.09% sodium azide

Reconstitution & Storage -20 °C

Background Descriptions

Precautions Anti-KI67 Rabbit Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-KI67 Rabbit Monoclonal Antibody - Protein Information

Name MKI67 (<u>HGNC:7107</u>)

Function

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).

Cellular Location

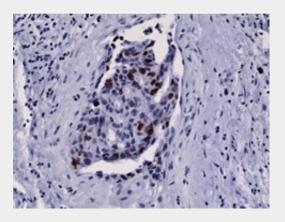
Chromosome. Nucleus. Nucleus, nucleolus Note=Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the mitotic chromosome surface (PubMed:27362226). Associates with satellite DNA in G1 phase (PubMed:9510506). Binds tightly to chromatin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

Anti-KI67 Rabbit Monoclonal Antibody - Protocols

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

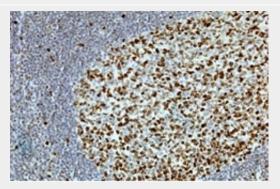
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-KI67 Rabbit Monoclonal Antibody - Images

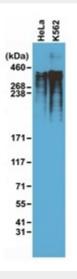




Immunohistochemical staining of FFPE human breast cancer tissue sections, using anti-Human KI67 Rabbit Monoclonal antibody.



Immunohistochemical staining of FFPE human tonsil tissue sections, using anti-human KI67 rabbit monoclonal antibody.



Western blot of Hela and K562 cell lysates using anti-KI67 rabbit monoclonal antibody.

Anti-KI67 Rabbit Monoclonal Antibody - Background

Ki-67 is a nuclear protein that is expressed in proliferating cells and may be required for maintaining cell proliferation. Ki-67 has been used as a marker for cell proliferation of solid tumors and some hematological malignancies. A correlation has been demonstrated between Ki-67 index and the histopathological grade of neoplasms. Assessment of Ki-67 expression in renal and ureter tumors shows a correlation between tumor proliferation and disease progression, thus making it possible to differentiate high-risk patients. Ki-67 expression may also prove to be important for distinguishing between malignant and benign peripheral nerve sheath tumors.