

Product datasheet

Anti-Ki67 antibody [BLR021E] - BSA free ab272075

Recombinant

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Overview

Product name	Anti-Ki67 antibody [BLR021E] - BSA free
Description	Rabbit monoclonal [BLR021E] to Ki67 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, ICC, IHC-P, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human Ki67 aa 1200-1250. The exact sequence is proprietary. Corresponds to the repetitive 66 bp element. NP_002408.2 and Gene ID 4288. Database link: P46013
Positive control	IHC-P: Human tonsil and ovarian carcinoma tissue. ICC: OVCAR-4 cells. ICC/IF: Acetone/methanol fixed Hela cells.
General notes	<p>ab272075 is the carrier-free version of ab243878.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is sold under License from Bethyl Laboratories, Inc.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 8.20 Preservative: 0.09% Sodium azide

	Constituent: 98% Borate buffered saline
Carrier free	Yes
Purification notes	Recombinant antibody was purified from cell culture supernatant.
Clonality	Monoclonal
Clone number	BLR021E
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab272075 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration. If fixing cells in 4% PFA (20 min, room temp), it is recommended to permeabilized cells with 0.1% Triton-X for 5 min.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Target

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.
Sequence similarities	Contains 1 FHA domain. Contains 16 K167R repeats. Contains 1 PP1-binding domain.
Developmental stage	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 fibrillarin-deficient regions surrounding nucleoli (PubMed:2674163, PubMed:8799815).

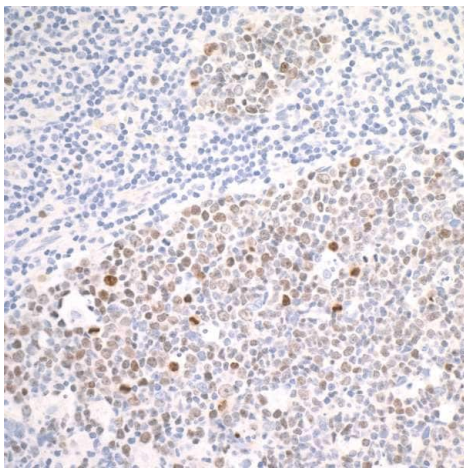
**Post-translational
modifications**

Phosphorylated. Hyperphosphorylated in mitosis (PubMed:10502411, PubMed:10653604). Hyperphosphorylated form does not bind DNA.

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 (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).

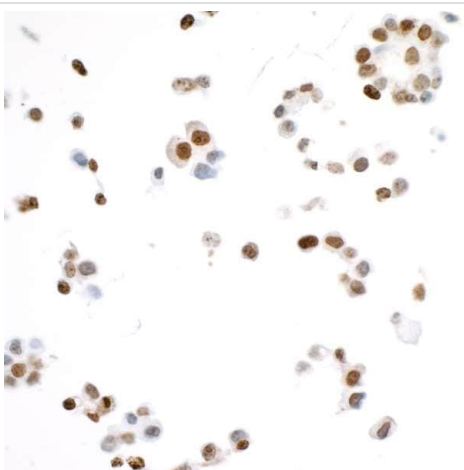
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ki67 antibody [BLR021E]
- BSA and Azide free (ab272075)

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide ([ab243878](#)).

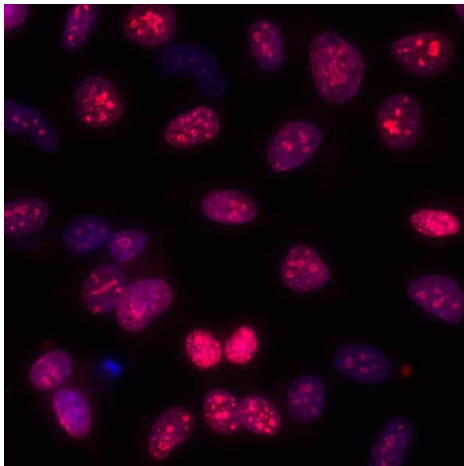
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human tonsil tissue, labeling Ki67 with [ab243878](#). HRP-conjugated goat anti-rabbit IgG was used as a secondary antibody. Detection: DAB.



Immunocytochemistry - Anti-Ki67 antibody
[BLR021E] - BSA and Azide free (ab272075)

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide ([ab243878](#)).

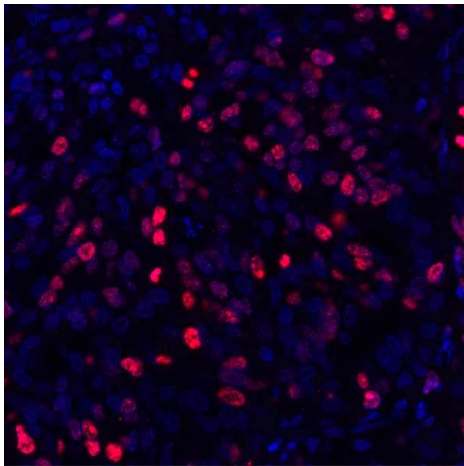
Immunocytochemical analysis of formalin-fixed, paraffin-embedded OVCAR-4 cells, labeling Ki67 with [ab243878](#). HRP-conjugated goat anti-rabbit IgG was used as a secondary antibody. Detection: DAB.



Immunocytochemistry/ Immunofluorescence - Anti-Ki67 antibody [BLR021E] - BSA and Azide free (ab272075)

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide ([ab243878](#)).

Immunocytochemical analysis of acetone/menthanol fixed HeLa cells, labeling Ki67 with [ab243878](#) at a 1/100 dilution. HRP-conjugated goat anti-rabbit IgG was used as a secondary antibody. Counterstain: DAPI.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ki67 antibody [BLR021E] - BSA and Azide free (ab272075)

This data was developed using the same antibody clone in a different buffer formulation containing Borate buffered saline, BSA, glycerol and sodium azide ([ab243878](#)).

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human ovarian carcinoma tissue, labeling Ki67 with [ab243878](#) at a 1/500 dilution. HRP-conjugated goat anti-rabbit IgG was used as a secondary antibody. Substrate: Opal™. Counterstain: DAPI (blue).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Ki67 antibody [BLR021E] - BSA and Azide free
(ab272075)

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