abcam

Product datasheet

Anti-Ki67 antibody [SP6], prediluted ab21700





重组 RabMAb

★★★★★ 3 Abreviews 27 References 9 图像

概述

产品名称 Anti-Ki67抗体[SP6], prediluted

描述 兔单克隆抗体[SP6] to Ki67, prediluted

宿主 Rabbit

特异性 ab21700 recognises Ki67.

经测试应用 适用于: WB, IHC-P, Flow Cyt (Intra), ICC/IF

种属反应性 与反应: Mouse. Human

预测可用于: Rat 🕰

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Ramos and HeLa cell lysates. IHC-P: Human tonsil and thymus tissue; Human endometrial

and breast adenocarcinoma tissue. ICC/IF: HeLa and HAP1 cells. Flow Cyt (intra): HAP1 cells.

常规说明 This product was switched from hybridoma to recombinant format on 25th October 2019.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C.

存储溶液 pH: 7.60

Preservative: 0.1% Sodium azide

Constituents: Tris buffered saline, 1% BSA

Inert stabilizer

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 SP6

 同种型
 IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab21700于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应 用	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 358 kDa.
IHC-P	★★★★★ (2)	1/1. Antigen retrieval: heat mediated antigen retrieval with sodium citrate buffer (pH 6.0)
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF	**** (1)	Use at an assay dependent concentration. 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

靶标

功能

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.

序列相似性

Contains 1 FHA domain.

Contains 16 K167R repeats.

Contains 1 PP1-binding domain.

发展阶段

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,

翻译后修饰

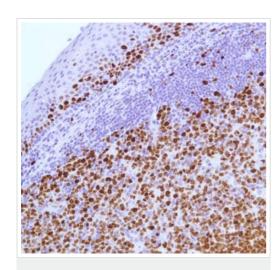
细胞定位

PubMed:8799815).

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

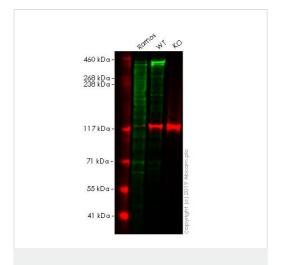
Chromosome. Nucleus. Nucleus, nucleolus. Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the mitotic chromosome surface (PubMed:27362226). Associates with satellite DNA in G1 phase (PubMed:9510506). Binds tightly to chromatin in interphase,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

图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ki67 antibody [SP6], prediluted (ab21700)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human tonsil tissue, staining Ki67 with ab21700.



Western blot - Anti-Ki67 antibody [SP6], prediluted (ab21700)

All lanes: Anti-Ki67 antibody [SP6] (ab16667) at 1/100 dilution

Lane 1: Ramos cell lysate

Lane 2: Wild-type HeLa cell lysate

Lane 3: MKI67 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

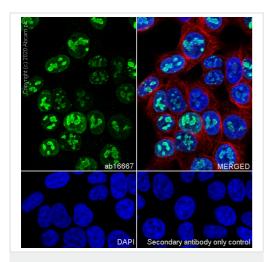
Performed under reducing conditions.

Predicted band size: 358 kDa **Observed band size:** 359 kDa

This data was developed using the same antibody clone in a different buffer formulation (ab16667).

Lanes 1 - 3: Merged signal (red and green). Green - <u>ab16667</u> observed at 359 kDa. Red - loading control, <u>ab130007</u> observed at 125 kDa.

<u>ab16667</u> was shown to react with Ki67 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <u>ab255407</u> (knockout cell lysate <u>ab263762</u>) was used. Wild-type and Ki67 knockout samples were subjected to SDS-PAGE. <u>ab16667</u> and Anti-Vinculin antibody [VIN-54] (<u>ab130007</u>) were incubated overnight at 4°C at 1 in 100 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

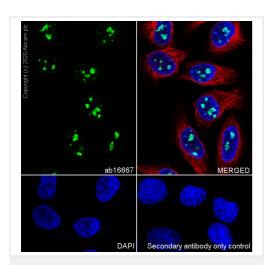


Immunocytochemistry/ Immunofluorescence - Anti-Ki67 antibody [SP6], prediluted (ab21700)

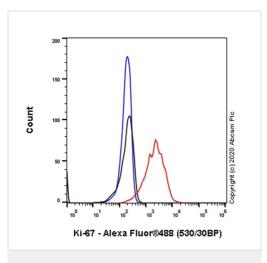
This data was developed using <u>ab16667</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 100% methanol-fixed, None permeabilized parental HAP1 cells labelling Ki67 with <u>ab16667</u> at 1/1000 dilution, followed by <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (2 μg/mL) (Green). Confocal image showing nucleolar staining in parental HAP1cell line <u>ab195889</u> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 μg/mL) (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) at 1000 dilution (2 μ g/mL).



Immunocytochemistry/ Immunofluorescence - Anti-Ki67 antibody [SP6], prediluted (ab21700)



Flow Cytometry (Intracellular) - Anti-Ki67 antibody [SP6], prediluted (ab21700)

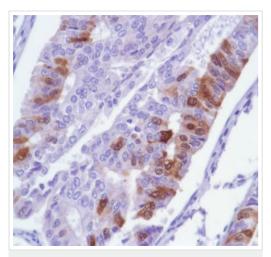
This data was developed using <u>ab16667</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 100% methanol-fixed, None permeabilized HeLa cells labelling Ki67 with <u>ab16667</u> at 1/1000 dilution, followed by <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (2 μg/mL) (Green). Confocal image showing nucleolar staining in HeLa cell line <u>ab195889</u> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 μg/mL) (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) at 1000 dilution (2 μ g/mL).

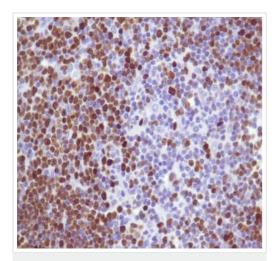
This data was developed using <u>ab16667</u>, the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized parental HAP1 (Wildtype control Human chronic myelogenous leukemia near-haploid cell line) cells labelling Ki67 with ab16667 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal lgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit lgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



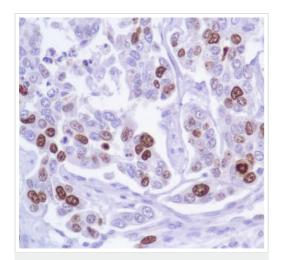
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ki67 antibody [SP6], prediluted (ab21700)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human endometrial adenocarcinoma tissue, staining Ki67 with ab21700.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ki67 antibody [SP6], prediluted (ab21700)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human thymus tissue, staining Ki67 with ab21700.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ki67 antibody [SP6], prediluted (ab21700)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human breast adenocarcinoma tissue, staining Ki67 with ab21700.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors