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antibody and ELISA experts

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Anti-Ki67/MKI67 Antibody Picoband®

Catalog Number: PB9026

About MKI67

Ki-67 (Proliferation-related Ki-67 antigen), also known as MKI67 or KIA, is a protein that in humans is encoded by the MKI67 gene. From study of a panel of human-rodent somatic cell hybrids, it has been demonstrated that a gene involved in the expression of the MKI67 antigen is located on chromosome 10. By in situ hybridization, Fonatsch et al. (1991) regionalized the MKI67 gene to chromosome 10q25-qter. By FISH, Traut et al. (1998) mapped the mouse Mki67 gene to chromosome 7F3-F5. Antigen KI-67 is a nuclear protein that is associated with and may be necessary for cellular proliferation. Furthermore it is associated with ribosomal RNA transcription. Inactivation of antigen KI-67 leads to inhibition of ribosomal RNA synthesis.

Overview

Product Name	Anti-Ki67/MKI67 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Ki67/MKI67 Antibody Picoband® catalog # PB9026. Tested in IF, IHC, ICC/IF, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P46013

Technical Details

Immunogen	E.coli-derived human Ki67 recombinant protein (Position: K2860-I3256).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

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Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Immunocytochemistry , 0.5-1ug/ml, Human, - Immunofluorescence, 5ug/ml, Human

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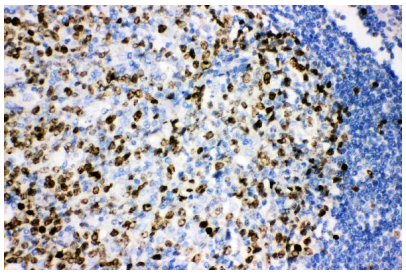
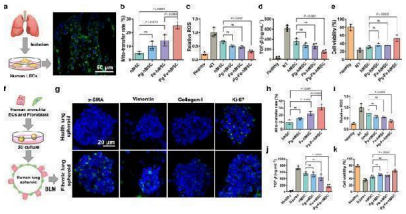
Anti-Ki67/MKI67 Antibody Picoband® (PB9026) Images



IHC analysis of Ki67 using anti-Ki67 antibody (PB9026). Ki67 was detected in paraffin-embedded section of human tonsil tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Ki67 Antibody (PB9026) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Therapeutic potentials of Pg-Fe-hMSC in both monocellular and multicellular humanized fibrotic models. a Schematic illustration and representative image of EpCAM immunostaining in primary human lung epithelial cells (hLECs). Scale bar, 50 um. b Mitochondrial transfer rates from the indicated hMSC to the primary hLEC (n = 3 biologically independent cells). c Relative intracellular ROS levels (n = 3 biologically independent cells), d TGF- beta expression levels (n = 4 biologically independent cells), and e Viability of BLM-treated hLEC after the indicated treatment using different engineered hMSCs (n = 3 biologically independent cells). f Schematic illustration showing the preparation of the 3D multicellular human fibrotic model. g Representative immunostaining images showing the expression of alpha -smooth muscle actin (alpha -SMA), vimentin, collagen-I, and Ki-67 in the healthy and fibrotic multicellular human spheroid models. Blue fluorescent signals indicate the cell nuclei and green signals indicate the biomarkers. Scale bar, 20 um. h Mitochondrial transfer rates of different engineered hMSC in fibrotic human lung spheroids (n = 3 biologically independent experiments). i Relative intracellular ROS levels (n = 3 biologically independent experiments) and j TGF- beta expression levels of fibrotic human lung spheroids after the indicated treatment using different engineered hMSCs (n = 4 biologically independent experiments). k Viability of fibrotic human lung spheroids after the indicated treatment using different engineered hMSCs (n = 3 biologically independent experiments). Data are presented as means ± SD. Statistical significance was analyzed using ordinary one-way ANOVA. ECs epithelial cells. Index in PubMed under a CC BY license. PMID: 37723135

miR-134-3p overexpression inhibits HuOCSC activity both in vitro and in vivo . (A) Proliferation inhibition rate assay (n = 3). ** P < 0.01 vs. miR-mut. t test. (B) Cell cycle assay (n = 3). * P < 0.05 vs. miR-mut; ** P < 0.01 vs. miR-mut. t test. (C) Transwell assay of migration ability of HuOCSCs (n = 3). ** P < 0.01 vs. miR-mut. t test. (D) Angiogenesis assay to detect the ability of formation of tubular 3D structures (n = 3). ** P < 0.01 vs. miR-mut. t test. (E) In vitro graft tumor

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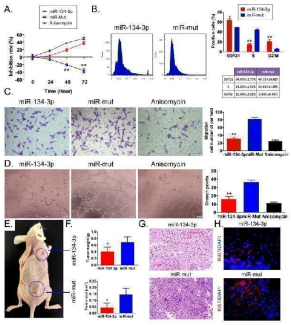
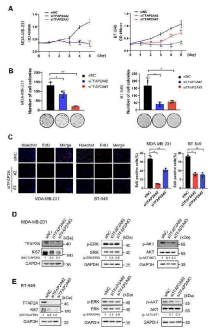
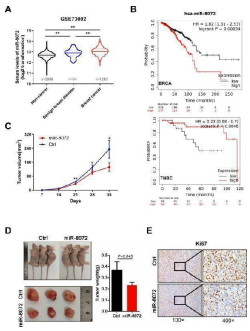


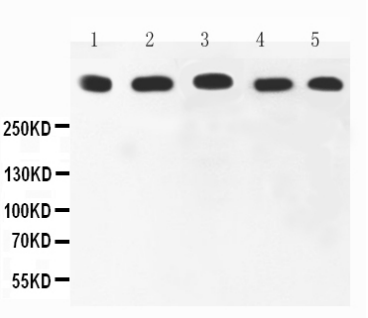
assay. * P < 0.05 vs. miR-mut. t test. (F) The weight and volume of graft tumors. * P < 0.05 vs. miR-mut. t test. (G) HE staining (2× magnification). (H) Immunofluorescence labeling of Ki67 (400× magnification).Index in PubMed under a CC BY license. PMID: 38021163



Silencing TFAP2A inhibits proliferation of TNBC cells. Expression of TFAP2A was knocked down by siRNAs in MDA-MB-231 and BT-549 cells, cell proliferation was assessed by A MTS assay, B Colony formation assay, and C EdU assay. D Western blot analysis showing the expression levels of Ki67, TFAP2A, and the phosphorylation levels of ERK and AKT in MDA-MB-231 cells and E BT-549 cells with or without TFAP2A knockdown Index in PubMed under a CC BY license. PMID: 38890750



miR-8072 suppresses TNBC tumor progression and predicts favorable prognosis. (A) Serum levels of miR-8072 in breast cancer, benign breast disease, and non-cancer samples were analyzed using data from GEO (GSE73002) (** P



Western blot analysis of Ki67 using anti-Ki67 antibody (PB9026). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: HELA Whole Cell Lysate, Lane 2: MCF-7 Whole Cell Lysate, Lane 3: COLO320 Whole Cell Lysate, Lane 4: HEPG2 Whole Cell Lysate, Lane 5: SKOV Whole Cell Lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Ki67 antigen affinity purified polyclonal antibody (Catalog # PB9026) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Ki67 at approximately 358KD. The expected band size for Ki67 is at 358KD.

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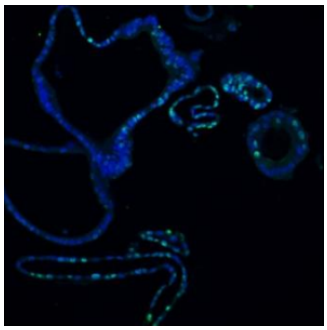
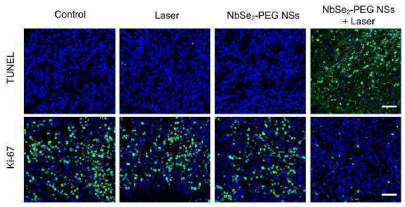
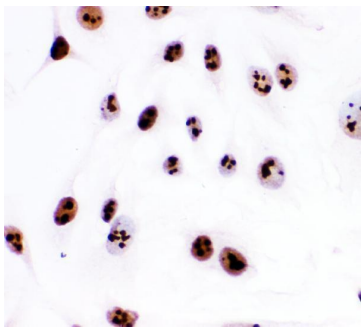


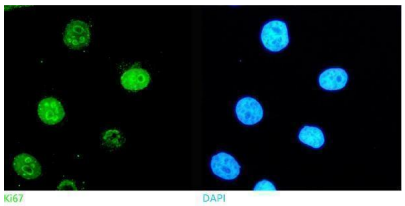
IF analysis of Ki67 using anti-Ki67 antibody (PB9026). Ki67 was detected in paraffin-embedded section of human colon organoid tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/mL rabbit anti-Ki67 Antibody (PB9026) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IF analysis of Ki67 using anti-Ki67 antibody (PB9026). Ki67 was detected in a paraffin-embedded section ofNude mouse tumor tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:200 rabbit anti-Ki67 Antibody (PB9026) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



ICC analysis of Ki67 using anti-Ki67 antibody (PB9026). Ki67 was detected in immunocytochemical section of Hela cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/ml rabbit anti-Ki67 Antibody (PB9026) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



ICC/IF analysis of Ki67 using anti-Ki67 antibody (PB9026). Ki67 was detected in an immunocytochemical section of human Hela cells. The cells were fixed with 4% paraformaldehyde for 10 minutes and then treated with a membrane permeabilization agent (AR0205) for 5 minutes.The cells were blocked with 10% goat serum. And then incubated with rabbit anti-Ki67 Antibody (PB9026) at a dilution of 1:50 overnight at 4°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

ICC/IF analysis of Ki67 using anti-Ki67 antibody (PB9026). Ki67 was detected in an immunocytochemical section of human SIHA cells. The cells were fixed with 4% paraformaldehyde for 10 minutes and then treated with a membrane permeabilization agent (AR0205) for 5

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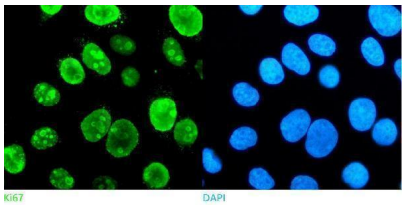
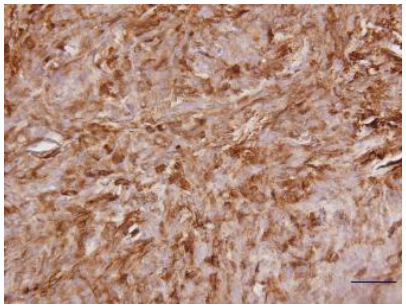


minutes.The cells were blocked with 10% goat serum. And then incubated with rabbit anti-Ki67 Antibody (PB9026) at a dilution of 1:50 overnight at 4°C. DyLight®488 conjugated goat Anti-rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC analysis of Ki67 using anti-Ki67 antibody (PB9026). Ki67 was detected in paraffin-embedded section of nude mouse tumor tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:1000 rabbit anti-Ki67 Antibody (PB9026) overnight at 4°C. Ready-to-use SABC-POD kit (rabbit IgG) was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

62 Publications Citing This Product

1. PubMed ID: PMID:31966612, Clinical biocharacterization of immunophenotype in hepatocellular carcinoma patients

2. PubMed ID: 10.1186/s12935-021-01775-5, Regulator of cullins-1 (ROC1) negatively regulates the Gli2 regulator SUFU to activate the hedgehog pathway in bladder cancer

3. PubMed ID: 10.2485/jhtb.30.273, Elevated CREPT Expression Enhances the Progression of Salivary Gland Adenoid Cystic Carcinoma

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