

# Ki67 (Ki-67): sc-23900

## BACKGROUND

Ki67 is a nuclear protein that is expressed in proliferating cells and may be required for maintaining cell proliferation. Ki67 has been used as a marker for cell proliferation of solid tumors and some hematological malignancies. A correlation has been demonstrated between Ki67 index and the histopathological grade of neoplasms. Assessment of Ki67 expression in renal and ureter tumors shows a correlation between tumor proliferation and disease progression, thus making it possible to differentiate high-risk patients. Ki67 expression may also prove to be important for distinguishing between malignant and benign peripheral nerve sheath tumors.

## CHROMOSOMAL LOCATION

Genetic locus: MKI67 (human) mapping to 10q26.2.

## SOURCE

Ki67 (Ki-67) is a mouse monoclonal antibody raised against nuclear fractions of human tumor cell line, L428.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ki67 (Ki-67) is available conjugated to agarose (sc-23900 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23900 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23900 PE), fluorescein (sc-23900 FITC), Alexa Fluor® 488 (sc-23900 AF488), Alexa Fluor® 546 (sc-23900 AF546), Alexa Fluor® 594 (sc-23900 AF594) or Alexa Fluor® 647 (sc-23900 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-23900 AF680) or Alexa Fluor® 790 (sc-23900 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

Ki67 (Ki-67) is recommended for detection of Ki67 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

Suitable for use as control antibody for Ki67 siRNA (h): sc-37613, Ki67 shRNA Plasmid (h): sc-37613-SH and Ki67 shRNA (h) Lentiviral Particles: sc-37613-V.

Molecular Weight of Ki67 isoforms: 395/345 kDa.

Positive Controls: Raji whole cell lysate: sc-364236.

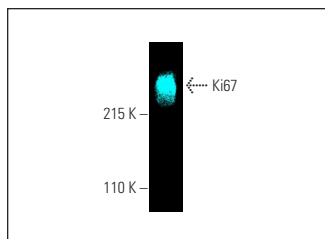
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

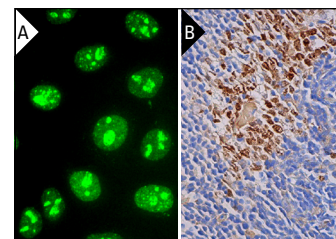
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



Ki67 (Ki-67) Alexa Fluor® 647: sc-23900 AF647. Direct fluorescent western blot analysis of Ki67 expression in Raji whole cell lysate. Blocked with UltraCruz® Blocking Reagent: sc-516214.



Ki67 (Ki-67): sc-23900. Immunofluorescence staining of formalin-fixed HeLa cells showing nucleolar and nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing nuclear staining of cells in germinal center (B).

## SELECT PRODUCT CITATIONS

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- Raghav, P.K., et al. 2018. Stem cell factor and NSC87877 combine to enhance c-Kit mediated proliferation of human megakaryoblastic cells. *PLoS ONE* 13: e0206364.
- Chen, M., et al. 2019. The specificity of EGF-stimulated IQGAP1 scaffold towards the PI3K-Akt pathway is defined by the IQ3 motif. *Sci. Rep.* 9: 9126.
- Karki, K., et al. 2020. Nuclear receptor 4A2 (NR4A2) is a druggable target for glioblastomas. *J. Neurooncol.* 146: 25-39.
- Hu, X., et al. 2021. Dihydroartemisinin is potential therapeutics for treating late-stage CRC by targeting the elevated c-Myc level. *Cell Death Dis.* 12: 1053.
- Zhang, Y.R., et al. 2022. NEK2 inactivates the Hippo pathway to advance the proliferation of cervical cancer cells by cooperating with STRIPAK complexes. *Cancer Lett.* 549: 215917.
- Yuan, B., et al. 2023. Nuclear receptor modulators inhibit osteosarcoma cell proliferation and tumour growth by regulating the mTOR signaling pathway. *Cell Death Dis.* 14: 51.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.