

# Ki67 (MIB-1): sc-101861

## 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.

## REFERENCES

1. Lopez, F., et al. 1991. Modalities of synthesis of Ki-67 antigen during the stimulation of lymphocytes. *Cytometry* 12: 42-49.
2. Schluter, C., et al. 1993. The cell proliferation-associated antigen of antibody Ki-67: a very large, ubiquitous nuclear protein with numerous repeated elements, representing a new kind of cell cycle-maintaining proteins. *J. Cell Biol.* 123: 513-522.

## CHROMOSOMAL LOCATION

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

## SOURCE

Ki67 (MIB-1) is a mouse monoclonal antibody raised against nuclear fractions of hodgkin's lymphoma cell line, L248 of human origin.

## PRODUCT

Each vial contains 1 ml culture supernatant containing IgG<sub>1</sub> with PBS and < 0.1% sodium azide.

## APPLICATIONS

Ki67 (MIB-1) is recommended for detection of Ki67 of human origin by immunofluorescence (starting dilution to be determined by researcher, dilution range 1:1-1:50) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range undiluted).

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.

## STORAGE

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

## PROTOCOLS

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

## RESEARCH USE

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

## SELECT PRODUCT CITATIONS

1. Ito, Y., et al. 2000. Ets-1 expression in extrahepatic bile duct carcinoma and cholangiocellular carcinoma. *Oncology* 58: 248-252.
2. Ito, Y., et al. 2001. Expression of p57/Kip2 protein in pancreatic adenocarcinoma. *Pancreas* 23: 246-250.
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10. Liang, H., et al. 2015. A collagen-binding EGFR single-chain Fv antibody fragment for the targeted cancer therapy. *J. Control. Release* 209: 101-109.
11. Liang, H., et al. 2016. A collagen-binding EGFR antibody fragment targeting tumors with a collagen-rich extracellular matrix. *Sci. Rep.* 6: 18205.
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14. Liu, N., et al. 2019. Inhibition of Aurora A enhances radiosensitivity in selected lung cancer cell lines. *Respir. Res.* 20: 230.
15. Wilkat, M., et al. 2020. Adenosine receptor 2B activity promotes autonomous growth, migration as well as vascularization of head and neck squamous cell carcinoma cells. *Int. J. Cancer* 147: 202-217.

## CONJUGATES

See **Ki67 (Ki-67): sc-23900** for Ki67 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor<sup>®</sup> 488, 546, 594, 647, 680 and 790.