

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 IgG₁ 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 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. Kan, P., et al. 2007. Peritumoral edema after stereotactic radiosurgery for intracranial meningiomas and molecular factors that predict its development. *J. Neurooncol.* 83: 33-38.
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6. Shen, C., et al. 2011. Endothelin B receptor expression in human astrocytoma: association with clinicopathological variables and survival outcomes. *Int. J. Neurosci.* 121: 626-631.
7. Maounis, N.F., et al. 2012. Overexpression of γ -Tubulin in non-small cell lung cancer. *Histol. Histopathol.* 27: 1183-1194.
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11. Liang, H., et al. 2016. A collagen-binding EGFR antibody fragment targeting tumors with a collagen-rich extracellular matrix. *Sci. Rep.* 6: 18205.
12. Chang, S.L., et al. 2017. HOXC6 overexpression is associated With Ki-67 expression and poor survival in NPC patients. *J. Cancer* 8: 1647-1654.
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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[®] 488, 546, 594, 647, 680 and 790.