

## Ki-67 (C-20): sc-7844

### BACKGROUND

Ki-67 is a nuclear protein that is expressed in proliferating cells and may be required for maintaining cell proliferation. Ki-67 has been used as a marker for cell proliferation of solid tumors and some hematological malignancies. A correlation has been demonstrated between Ki-67 index and the histopathological grade of neoplasms. Assessment of Ki-67 expression in renal and ureter tumors shows a correlation between tumor proliferation and disease progression, thus making it possible to differentiate high-risk patients. Ki-67 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. Gore, S.D., et al. 1993. Validation of flow-cytometric determination of Ki-67 expression as a measure of growth factor response in acute myelogenous leukemia. *Exp. Hematol.* 21: 1702-1708.

### CHROMOSOMAL LOCATION

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

### SOURCE

Ki-67 (C-20) is available as either goat (sc-7844) or rabbit (sc-7844-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of Ki-67 of human origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7844 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Ki-67 (C-20) is recommended for detection of Ki-67 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ki-67 siRNA (h): sc-37613, Ki-67 shRNA Plasmid (h): sc-37613-SH and Ki-67 shRNA (h) Lentiviral Particles: sc-37613-V.

Molecular Weight of Ki-67 isoforms: 395/345 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, MCF7 nuclear extract: sc-2149 or Raji whole cell lysate: sc-364236.

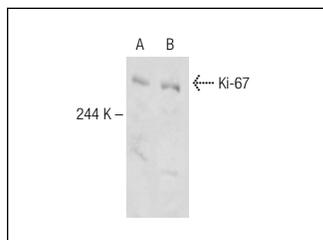
### STORAGE

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



Ki-67 (C-20): sc-7844. Western blot analysis of Ki-67 expression in Raji whole cell lysate (A) and K-562 nuclear extract (B).

### SELECT PRODUCT CITATIONS

1. Gupta, S., et al. 2001. Infiltration of differentiated thyroid carcinoma by proliferating lymphocytes is associated with improved disease-free survival for children and young adults. *J. Clin. Endocrinol. Metab.* 86: 1346-1354.
2. Orimo, A., et al. 2001. Cancer-associated myofibroblasts possess various factors to promote endometrial tumor progression. *Clin. Cancer Res.* 7: 3097-3105.
3. Lam, S.Y., et al. 2008. Chronic hypoxia upregulates the expression and function of proinflammatory cytokines in the rat carotid body. *Histochem. Cell Biol.* 130: 549-559.
4. Zanet, J., et al. 2010. A mitosis block links active cell cycle with human epidermal differentiation and results in endoreplication. *PLoS ONE* 5: e15701.
5. Guilini, C., et al. 2010. Divergent roles of prokineticin receptors in the endothelial cells: angiogenesis and fenestration. *Am. J. Physiol. Heart Circ. Physiol.* 298: H844-H852.
6. Wu, G.J., et al. 2011. Enforced expression of METCAM/MUC18 increases tumorigenesis of human prostate cancer LNCaP cells in nude mice. *J. Urol.* 185: 1504-1512.
7. Siejka, A., et al. 2011. GHRH antagonist MZ-5-156 increases the expression of AMPK in A549 lung cancer cells. *Cell Cycle* 10: 3714-3718.
8. Lam, S.Y., et al. 2012. Chronic intermittent hypoxia induces local inflammation of the rat carotid body via functional upregulation of proinflammatory cytokine pathways. *Histochem. Cell Biol.* 137: 303-317.



Try **Ki-67 (Ki-67): sc-23900** or **Ki-67 (MIB-1): sc-101861**, our highly recommended monoclonal alternatives to Ki-67 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Ki-67 (Ki-67): sc-23900**.