SANTA CRUZ BIOTECHNOLOGY, INC.

Ki-67 (H-300): sc-15402



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.
- 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

Ki-67 (H-300) is a rabbit polyclonal antibody raised against amino acids 2641-2940 mapping at the C-terminus of Ki-67 of human origin.

PRODUCT

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

APPLICATIONS

Ki-67 (H-300) 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), immunohistochemistry (including paraffin-embedded sections) (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, Raji whole cell lysate: sc-364236 or MCF7 nuclear extract: sc-2149.

STORAGE

Store at 4° C, **D0 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 (H-300): sc-15402. Western blot analysis of Ki-67 expression in MCF7 nuclear extract.

Ki-67 (H-300): sc-15402. Nuclear Ki67 in mouse mammary gland (60X microscopic magnification in oil). Dilution 1:50 in dilution buffer (0.05% BSA in PBS) Blocking: 0.1% BSA in PBS at room temp. Kindly provided by Dr. Albert J. Fornace Jr., Georgetown University.

SELECT PRODUCT CITATIONS

- 1. Hermanson, O., et al. 2002. N-CoR controls differentiation of neural stem cells into astrocytes. Nature 419: 863-958.
- 2. Cristina, C., et al. 2010. VEGF and CD31 association in pituitary adenomas. Endocr. Pathol. 21: 154-160.
- Ouyang, N., et al. 2010. Pregnane X receptor suppresses proliferation and tumourigenicity of colon cancer cells. Br. J. Cancer 102: 1753-1761.
- 4. Saggar, J.K., et al. 2010. Dietary flaxseed lignan or oil combined with tamoxifen treatment affects MCF-7 tumor growth through estrogen receptor- and growth factor-signaling pathways. Mol. Nutr. Food Res. 54: 415-425.
- 5. Pinto, LC., et al. 2010. Proliferative, structural and molecular features of the Mdx mouse prostate. Int. J. Exp. Pathol. 91: 408-419.
- Li, D., et al. 2011. KLF4-mediated negative regulation of IFITM3 expression plays a critical role in colon cancer pathogenesis. Clin. Cancer Res. 17: 3558-3568.
- Kuo, T.C., et al. 2011. A unique P-glycoprotein interacting agent displays anticancer activity against hepatocellular carcinoma through inhibition of GRP78 and mTOR pathways. Biochem. Pharmacol. 81: 1136-1144.
- Lee, J.S., et al. 2012. Generation of cancerous neural stem cells forming glial tumor by oncogenic stimulation. Stem Cell Rev. 8: 532-545.
- Ren, G., et al. 2012. A micro-RNA connection in BRaf(V600E)-mediated premature senescence of human melanocytes. Int. J. Cell Biol. 2012: 913242.

MONOS Satisfation Guaranteed

Try Ki-67 (Ki-67): sc-23900 or Ki-67 (MIB-1): sc-101861, our highly recommended monoclonal alternatives to Ki-67 (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see Ki-67 (Ki-67): sc-23900.