SONY

Product Data Sheet

Purified anti-mouse Ki-67

Catalog # / Size: 3862010 / 100 µg
3862005 / 25 µg

Clone: 16A8

Isotype: Rat IgG2a, κ

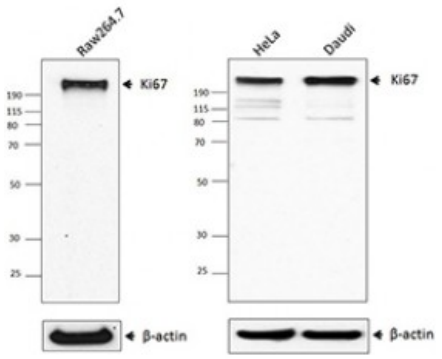
Immunogen: *E. coli* expressed partial mouse Ki-67 recombinant protein, 1816-2163 aa.

Reactivity: Human,Mouse

Preparation: The antibody was purified by affinity chromatography.

Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.05% sodium azide.

Concentration: 0.5



Total cell lysates (15 microg protein) from Raw264.7, HeLa, and Daudi were resolved by 4-12% Bis-tris gel electrophoresis, transferred to nitrocellulose, and probed with mouse Ki-67 Antibody (clone 16A8) (upper). Proteins were visualized using a goat an

Applications:

Applications: Other

Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 5 microL per 5 ml antibody dilution buffer for each mini-gel (0.5 microg/ml). Additionally, each lot of this antibody is quality control tested by our Ki-67 staining protocol below. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunofluorescence staining.

Ki-67 Staining Protocol:

1. Prepare 70% ethanol and chill at -20°C.
2. Prepare target cells of interest and wash 2X with PBS by centrifuge at 350x*g* for 5 minutes.
3. Discard supernatant and loosen the cell pellet by vortexing.
4. Add 3 ml cold 70% ethanol drop by drop to the cell pellet while vortexing.
5. Continue vortexing for 30 seconds and then incubate at -20°C for 1 hour.
6. Wash 3X with BioLegend Cell Staining Buffer and then resuspend the cells at the concentration of 0.5-10 x 10^6/ml.
7. Mix 100 microL cell suspension with proper fluorochrome-conjugated Ki-67 antibody and incubate at room temperature in the dark for 30 minutes.
8. Wash 2X with BioLegend Cell Staining and then resuspend in 0.5 ml cell staining buffer for flow cytometric analysis.

Application References:

1. Medina-Reyes EI, *et al.* 2015. *Environ Res.* 136:424. PubMed
2. Guillaumond F, *et al.* 2015. *PNAS.* 112:2473. PubMed

3. Sharma SK, *et al.* 2015. *J Immunol.* 194:5529. PubMed
4. Rodero MP, *et al.* 2014. *J. Invest. Dermatol.* 7:1991-7. PubMed

Description: The nuclear protein Ki-67 was first identified by the monoclonal antibody Ki-67, which was generated by immunizing mice with nuclei of the L428 Hodgkin lymphoma cell line. Ki-67 protein plays an essential role in ribosomal RNA transcription and cell proliferation. Expression of Ki-67 occurs during G1, S, G2, and M phase, while in G0 phase the Ki-67 protein is not detectable. Ki-67 is strongly expressed in proliferating cells and has been reported as a prognostic marker in various tumors.

Antigen References:

1. Starborg M, *et al.* 1996. *J. Cell. Sci.* 109:143.
2. Byeon IJ, *et al.* 2005. *Nat. Struct. Mol. Biol.* 12:987.
3. Yerushalmi R, *et al.* 2010. *Lancet. Oncol.* 11:174.
4. Beltrami AP, *e*