

# Ki-67 (D3B5) Rabbit mAb (Alexa Fluor® 647 Conjugate)

✓ 100 µl  
 (50 tests)



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**For Research Use Only. Not For Use In Diagnostic Procedures.**

Applications	Species Cross-Reactivity*	Isotype
IF-IC, IF-F, F Endogenous	H, M, R	Rabbit IgG

**Description:** This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 647 fluorescent dye and tested in-house for direct flow cytometric and immunofluorescent analysis in human and rat cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated Ki-67 (D3B5) Rabbit mAb #9129.

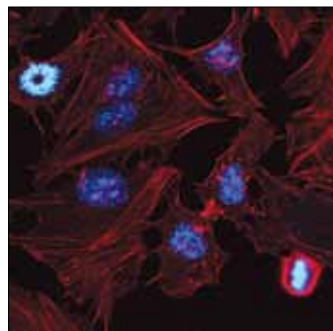
**Background:** Ki-67, named after the location where it was discovered (Kiel University, Germany), is a nuclear nonhistone protein (1) that is universally expressed among proliferating cells and absent in quiescent cells (2). Ki-67 detects proliferating cells in G1, S, G2, and mitosis, but not in the G0 resting phase. Research studies have shown that high levels of Ki-67 are associated with poorer breast cancer survival (3). Research studies have explored the use of Ki-67, along with other markers, as potential prognostic or predictive markers in breast cancer and other malignant diseases (4).

**Specificity/Sensitivity:** Ki-67 (D3B5) Rabbit mAb (Alexa Fluor® 647 Conjugate) recognizes endogenous levels of total Ki-67 protein.

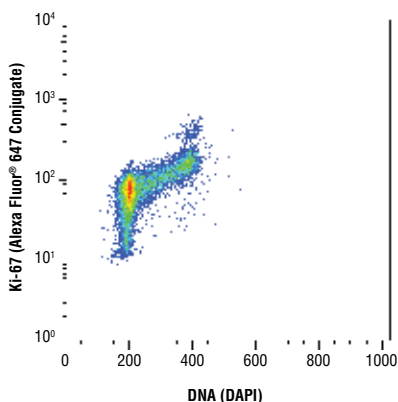
**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a recombinant protein specific to the amino terminus of human Ki-67 protein.

## Background References:

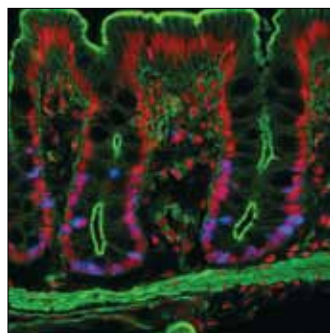
- (1) Gerdes, J. et al. (1983) *Int J Cancer* 31, 13-20.
- (2) Weigel, M.T. and Dowsett, M. (2010) *Endocr Relat Cancer* 17, R245-62.
- (3) Jones, R.L. et al. (2009) *Breast Cancer Res Treat* 116, 53-68.
- (4) Yerushalmi, R. et al. (2010) *Lancet Oncol* 11, 174-83.



◀ **Confocal immunofluorescent analysis of HeLa cells using Ki-67 (D3B5) Rabbit mAb (Alexa Fluor® 647 Conjugate) (blue pseudocolor) and Phospho-Histone H3 (Ser10) (D2C8 XP® Rabbit mAb (Alexa Fluor® 488 Conjugate) #3465 (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red).**



Flow cytometric analysis of Jurkat cells using Ki-67 (D3B5) Rabbit mAb (Alexa Fluor® 647 Conjugate) and DAPI #4083 (DNA content).



Confocal immunofluorescent analysis of rat colon using Ki-67 (D3B5) Rabbit mAb (Alexa Fluor® 647 Conjugate) (blue pseudocolor). Actin filaments were labeled with Alexa Fluor® 488 Phalloidin #8878 (green). Red = Propidium Iodide (PI)/RNase Staining Solution #4087.

Entrez-Gene ID #4288  
 UniProt ID #P46013

**Storage:** Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. *Do not aliquot the antibody. Protect from light. Do not freeze.*

**\*Species cross-reactivity other than human is determined by western blot using the unconjugated antibody.**

## Recommended Antibody Dilutions:

Immunofluorescence (IF-IC)	1:50
Immunofluorescence (IF-F)	1:50
Flow Cytometry	1:50

**For product specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).**

**Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.**

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**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.