#12100 Store at -20°C

# Aurora A (1F8) Mouse mAb

☑ 100 µl
(10 western blots)

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

**Entrez-Gene ID** #6790
**UniProt ID** #O14965

| Applications | Species Cross-Reactivity* | Molecular Wt. | Isotype |
|---|---|---|---|
| W, IF-IC, F<br>Endogenous | H, Mk | 48 kDa | Mouse IgG1** |

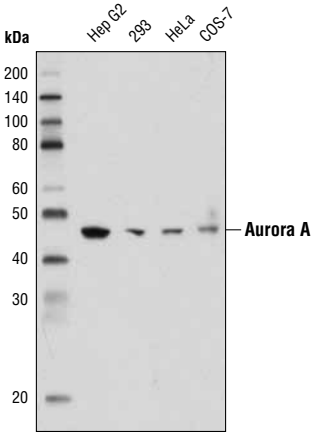
**Background:** Aurora A (AIK) is a cell cycle-regulated Ser/Thr protein kinase that is overexpressed in many tumor cell lines (1-3). Phosphorylation of Aurora A at Thr288 within the kinase activation loop results in a significant increase in its activity and may target the protein for proteasomal degradation during mitosis (4). The closely-related kinase Aurora B (AIM1) has been implicated in multiple mitotic events (5), and siRNA silencing of Aurora B expression results in reduced histone H3 phosphorylation, aberrant chromosome alignment/segregation, and altered survivin localization (6).

**Specificity/Sensitivity:** Aurora A (1F8) Mouse mAb recognizes endogenous levels of total Aurora A protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a recombinant protein specific to human Aurora A protein.

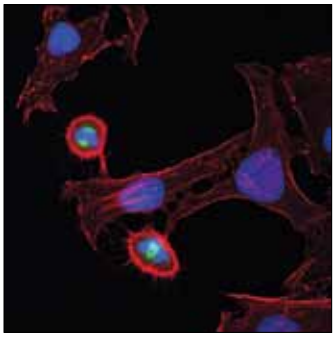
**Background References:**

(1) Bischoff, J.R. et al. (1998) *EMBO J* 17, 3052-65.
(2) Zhou, H. et al. (1998) *Nat Genet* 20, 189-93.
(3) Sen, S. et al. (1997) *Oncogene* 14, 2195-200.
(4) Walter, A.O. et al. (2000) *Oncogene* 19, 4906-16.
(5) Kallio, M.J. et al. (2002) *Curr Biol* 12, 900-5.
(6) Hauf, S. et al. (2003) *J Cell Biol* 161, 281-94.

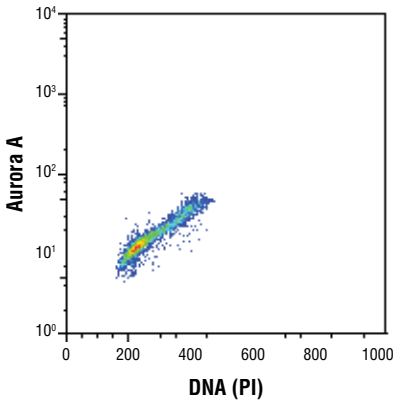



*Western blot analysis of extracts from various cell lines using Aurora A (1F8) Mouse mAb.*

HeLa



*Confocal immunofluorescent analysis of HeLa cells using Aurora A (1F8) Mouse mAb (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).*




*Flow cytometric analysis of Jurkat cells using Aurora A (1F8) Mouse mAb and propidium iodide (DNA content). Anti-mouse IgG (H+L), F(ab')$_2$ Fragment (Alexa Fluor® 488 Conjugate) #4408 was used as a secondary antibody.*

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.**

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-mouse secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**

| | |
|---|---|
| Western blotting | 1:1000 |
| Immunofluorescence (IF-IC) | 1:800 |
| Flow Cytometry | 1:1600 |

**For product specific protocols please see the web page for this product at www.cellsignal.com.**

**Please visit www.cellsignal.com for a complete listing of recommended companion products.**





**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.