

#4718 Store at -20°C

Aurora A/AIK (1G4) Rabbit mAb

✓ 100 µl
(10 western blots)



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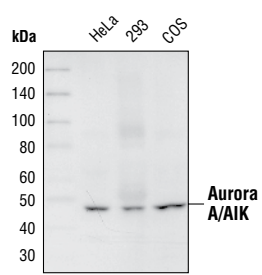
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IF-IC Endogenous	H, Mk	48 kDa	IgG Rabbit**

Background: Aurora A/AIK, a cell cycle-regulated serine/threonine protein kinase, is overexpressed in many tumor cell lines (1–3). Phosphorylation of Thr288, which is within the activation loop of the kinase, results in a significant increase in its activity and may target it 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/AIK (1G4) Rabbit mAb detects endogenous levels of total Aurora A/AIK protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of human Aurora A/AIK.



Western blot analysis of extracts from HeLa, 293 and COS cells, using Aurora A/AIK (1G4) Rabbit mAb.

Entrez-Gene ID #6790
Swiss-Prot Acc. #O14965

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

Recommended Antibody Dilutions:

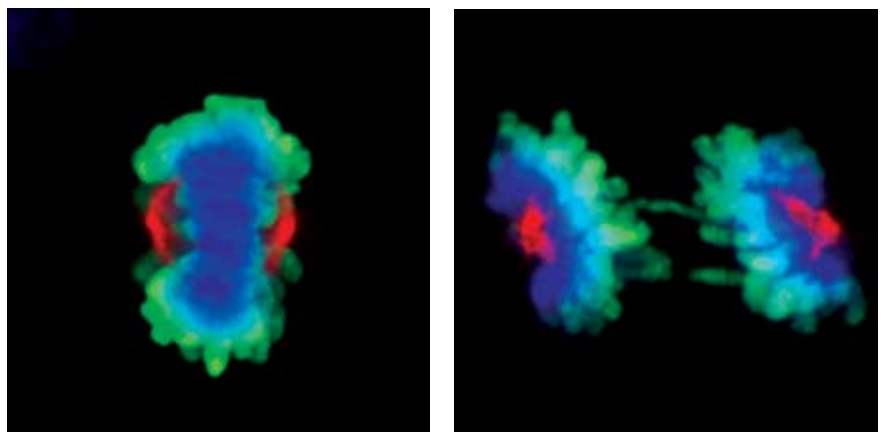
Western blotting	1:1000
Immunoprecipitation	1:100
Immunofluorescence (IF-IC)	1:100

For application 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.

Background References:

- (1) Bischoff, J.R. et al. (1998) *EMBO J.* 17, 3052–3065.
- (2) Zhou, H. et al. (1998) *Nat. Genet.* 20, 189–193.
- (3) Sen, S. et al. (1997) *Oncogene* 14, 2195–2200.
- (4) Walter, A.O. et al. (2000) *Oncogene* 19, 4906–4916.
- (5) Kallio, M.J. et al. (2002) *Curr. Biol.* 12, 900–905.
- (6) Hauf, S. et al. (2003) *J. Cell Biol.* 161, 281–294.



Confocal immunofluorescent images of mitotic COS cells during metaphase (left) or anaphase (right), labeled with Aurora A/AIK (1G4) Rabbit mAb (red) and Phospho-Histone H3 (Ser10) (6G3) Mouse mAb #9706 (green). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

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

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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.