

Aurora A/AIK Antibody

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com

Support ■ 877-678-TECH (8324)
info@cellsignal.com

Web ■ www.cellsignal.com

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

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

| Applications W Endogenous | Species Cross-Reactivity* H, Mk | Molecular Wt. 48 kDa | Source Rabbit** |
|---------------------------------|------------------------------------|-------------------------|--------------------|
|---------------------------------|------------------------------------|-------------------------|--------------------|

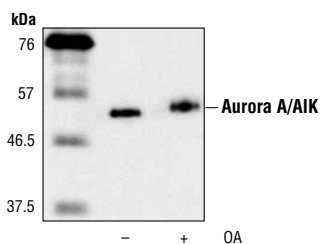
Background: Aurora A/AIK, a cell cycle-regulated serine/threonine protein kinase, is overexpressed in many tumor cell lines (1–3). Phosphorylation of Thr288, which is within the activation loop of the kinase, results in a significant increase in its activity and may target it for proteasomal degradation 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 Antibody detects endogenous levels of total Aurora A/AIK protein. The antibody may cross-react with AIK3.

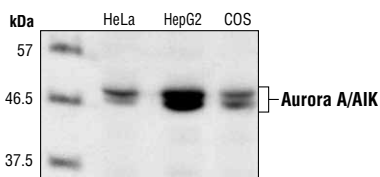
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of human Aurora A/AIK. Antibodies are purified by protein A and peptide affinity chromatography.

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.



Western blot analysis of purified mouse His-Aurora A/AIK expressed in Sf9 insect cells, untreated or treated with okadaic acid 1 hour prior to harvest, using Aurora A/AIK Antibody.



Western blot analysis of extracts from HeLa, HepG2 and COS cells, using Aurora A/AIK Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. 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

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.

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.

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.