

#5060 Store at -20°C

RKIP (G38) Antibody



✓ 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.

Entrez-Gene ID #5037
Swiss-Prot Acc. #P30086

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	21 kDa	Rabbit**

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.

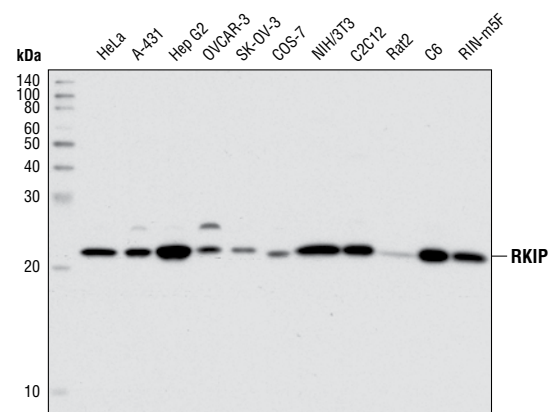
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Background: Raf kinase inhibitor protein (RKIP) is a member of the phosphatidylethanolamine-binding protein (PEBP) family that associates with Raf-1 and the MEK and MAP kinases (1). RKIP has been shown to complex with Raf-1, MEK, and ERK (2). Although MEK and ERK can simultaneously bind RKIP, the association between Raf-1 and RKIP and that of RKIP and MEK are mutually exclusive. Thus, RKIP competitively disrupts the Raf-1-MEK complex and effectively terminates signal transmission from Raf-1 to MAP kinases (2). The inhibitory effect of RKIP on MAP kinase signaling is eliminated by PKC phosphorylation of RKIP at Ser153 (3). PKC phosphorylation on Ser153 also promotes the association of RKIP with GRK2, which prevents GRK2-dependent internalization of GPCR (4). RKIP also interacts with modules of the NF-κB pathway, including NF-κB-inducing kinase (NIK), TAK1, IKKα and IKKβ (5). These interactions antagonize cytokine-induced activation of the NF-κB pathway (5). Restoration of RKIP expression is associated with the inhibition of prostate cancer metastasis, implying that RKIP may be a potential clinical target as a suppressor of tumor metastasis through inhibition of vascular invasion (6).

Specificity/Sensitivity: RKIP (G38) Antibody detects endogenous levels of total RKIP protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (blue-carrier) corresponding to residues surrounding Gly38 of human RKIP protein. Antibodies were purified by protein A and peptide affinity chromatography.

- Background References:**
- (1) Yeung, K. et al. (1999) *Nature* 401, 173-177.
 - (2) Yeung, K. et al. (2000) *Mol. Cell. Biol.* 20, 3079-3085.
 - (3) Corbit., K. C. et al. (2003) *J. Biol. Chem.* 278, 13061-13068.
 - (4) Lorenz, K. et al. (2003) *Nature* 426, 574-579.
 - (5) Yeung, K. C. et al. (2001) *Mol. Cell. Biol.* 21, 3079-3085.
 - (6) Fu, Z. et al. (2003) *J. Natl. Cancer Inst.* 95, 878-889.



Western blot analysis of extracts from various cell lines using RKIP (G38) Antibody.

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.