

#4742 Store at -20C

## RKIP Antibody



**Cell Signaling**  
TECHNOLOGY®

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

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	21	Rabbit	#P30086	5037

### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### 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.

### Specificity / Sensitivity

RKIP Antibody detects endogenous levels of total RKIP protein.

### Species predicted to react based on 100% sequence homology:

Bovine

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with synthetic peptides corresponding to human and mouse RKIP. Antibodies are purified by protein A and peptide affinity chromatography.

### 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 form a 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).

### Background References

1. Yeung, K. et al. (1999) *Nature* 401, 173-7.
2. Yeung, K. et al. (2000) *Mol Cell Biol* 20, 3079-85.
3. Corbit, K.C. et al. (2003) *J Biol Chem* 278, 13061-8.
4. Lorenz, K. et al. (2003) *Nature* 426, 574-9.
5. Yeung, K.C. et al. (2001) *Mol Cell Biol* 21, 7207-17.
6. Fu, Z. et al. (2003) *J Natl Cancer Inst* 95, 878-89.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

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

### Applications Key

**WB:** Western Blotting

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

**Trademarks and Patents**

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](https://cellsignal.com/trademarks) for more information.

**Limited Uses**

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.