

#12636 Store at -20°C

RIP4 Antibody


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

Applications: WB, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 86	Source: Rabbit	UniProt ID: #P57078	Entrez-Gene Id: 54101
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Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:50
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	RIP4 Antibody recognizes endogenous levels of total RIP4 protein.	
Species predicted to react based on 100% sequence homology:	Monkey	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human RIP4 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	<p>The receptor-interacting protein (RIP) family of serine-threonine kinases (RIP, RIP2, RIP3, and RIP4) are important regulators of cellular stress that trigger pro-survival and inflammatory responses through the activation of NF-κB, as well as pro-apoptotic pathways (1). In addition to the kinase domain, RIP contains a death domain responsible for interaction with the death domain receptor Fas and recruitment to TNF-R1 through interaction with TRADD (2,3). RIP-deficient cells show a failure in TNF-mediated NF-κB activation, making the cells more sensitive to apoptosis (4,5). RIP also interacts with TNF-receptor-associated factors (TRAFs) and can recruit IKKs to the TNF-R1 signaling complex via interaction with NEMO, leading to IκB phosphorylation and degradation (6,7). Overexpression of RIP induces both NF-κB activation and apoptosis (2,3). Caspase-8-dependent cleavage of the RIP death domain can trigger the apoptotic activity of RIP (8).</p> <p>Receptor-interacting serine-threonine kinase 4 (RIP4, ANKRD3, DIK, PKK, or RIPK4) is a membrane-associated, ankyrin repeat-containing member of the RIP family first identified in HaCat cells (9,10). RIP4 has been shown to be involved in keratinocyte differentiation <i>in vivo</i> as well as wound repair (11-13). Studies indicate that siRNA knockdown of RIP4 in human xenografted tumor cells suppresses Wnt-dependent growth while over-expression of RIP4 <i>in vitro</i> stabilized β-catenin and lead to an increase in Wnt-dependent gene expression (14).</p>	

Background References	<ol style="list-style-type: none"> Meylan, E. and Tschopp, J. (2005) <i>Trends Biochem Sci</i> 30, 151-9. Hsu, H. et al. (1996) <i>Immunity</i> 4, 387-96. Stanger, B.Z. et al. (1995) <i>Cell</i> 81, 513-23. Ting, A.T. et al. (1996) <i>EMBO J</i> 15, 6189-96. Kelliher, M.A. et al. (1998) <i>Immunity</i> 8, 297-303. Devin, A. et al. (2000) <i>Immunity</i> 12, 419-29. Zhang, S.Q. et al. (2000) <i>Immunity</i> 12, 301-11. Lin, Y. et al. (1999) <i>Genes Dev</i> 13, 2514-26. Bhr, C. et al. (2000) <i>J Biol Chem</i> 275, 36350-7. Chen, L. et al. (2001) <i>J Biol Chem</i> 276, 21737-44. Rountree, R.B. et al. (2010) <i>J Invest Dermatol</i> 130, 102-12. Adams, S. et al. (2007) <i>J Invest Dermatol</i> 127, 538-44. Holland, P. et al. (2002) <i>Curr Biol</i> 12, 1424-8. Huang, X. et al. (2013) <i>Science</i> 339, 1441-5.
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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 **IP:** Immunoprecipitation

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

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