

RIP4 Antibody

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

Applications W, IP Endogenous	Species Cross-Reactivity* H, (Mk)	Molecular Wt. 86 kDa	Source Rabbit**
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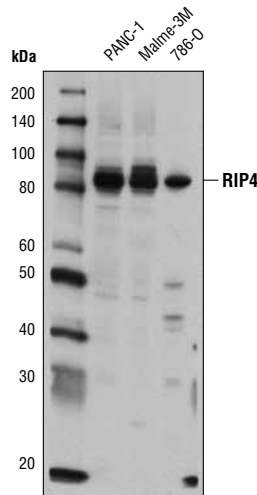
Background: The receptor-interacting protein (RIP) family of serine-threonine kinases (RIP, RIP2, RIP3, and RIP4) are important regulators of cellular stress that trigger pro-survival and inflammatory responses through the activation of NF- κ B, as well as pro-apoptotic pathways (1). In addition to the 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- κ B 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 κ B phosphorylation and degradation (6,7). Overexpression of RIP induces both NF- κ B activation and apoptosis (2,3). Caspase-8-dependent cleavage of the RIP death domain can trigger the apoptotic activity of RIP (8).

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 *in vivo* 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 *in vitro* stabilized β -catenin and lead to an increase in Wnt-dependent gene expression (14).

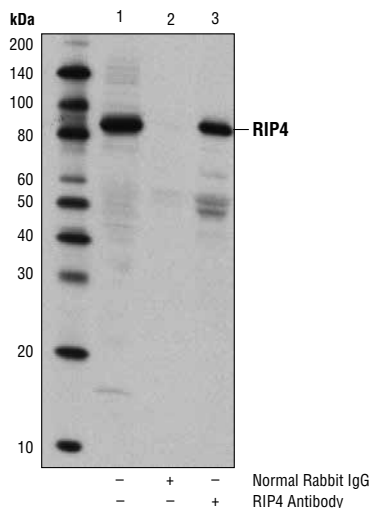
Specificity/Sensitivity: RIP4 Antibody recognizes endogenous levels of total RIP4 protein.

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.

Immunoprecipitation of RIP4 from PANC-1 cell extracts, using Normal Rabbit IgG #2729 (lane 2) or RIP4 Antibody (lane 3). Lane 1 is 10% input. Western blot was performed using RIP4 Antibody. Mouse Anti-rabbit IgG (Conformation Specific) (L27A9) mAb #3678 was used as a secondary antibody to avoid detection of IgG.



Western blot analysis of extracts from PANC-1, Malme-3M, and 786-O cells using RIP4 Antibody.



Entrez Gene ID #54101
UniProt ID #P57078

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/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
Immunoprecipitation 1:50

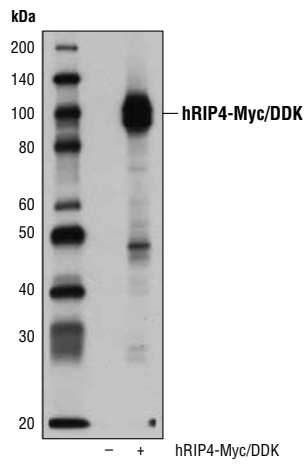
For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

Background References:

- (1) Meylan, E. and Tschopp, J. (2005) *Trends Biochem Sci* 30, 151-9.
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- (12) Adams, S. et al. (2007) *J Invest Dermatol* 127, 538-44.
- (13) Holland, P. et al. (2002) *Curr Biol* 12, 1424-8.
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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.



Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with a construct expressing Myc/DDK-tagged full-length human RIP4 isoform 2 (hRIP4-Myc/DDK; +), using RIP4 Antibody.