

Product Information

ANTI-RIP (Receptor Interacting Protein)

Developed in Rabbit,
Affinity Isolated Antibody

Product Number **R8274**

Product Description

Anti-RIP is developed in rabbit using a synthetic human RIP C-terminal peptide: Lys-Trp-Val-Met-Arg-Glu-Gly-Ile-Lys-Gly-Ala-Thr-Val-Gly-Lys-Leu-Ala conjugated to KLH with glutaraldehyde. The peptide corresponds to amino acid residues 634-650 of human RIP. This sequence is highly conserved in mouse. The antibody is affinity-purified using the Immunizing peptide immobilized on agarose.

Anti-RIP recognizes an epitope located on the C-terminal region of RIP. By immunoblotting, the antibody reacts specifically with RIP (single band at 74 kDa). Staining of RIP band by immunoblotting is specifically inhibited by the RIP peptide (amino acid residues 634-650).

RIP (Receptor Interacting Protein) is a 74 kDa Ser/Thr kinase which interacts with CD95 (Fas/APO-1) receptor and the tumor necrosis factor receptor (TNFR1).^{1,2} It is a cell death domain adapter protein which can bind to the adapter proteins TRADD, RAID (CRADD) and TRAF2. RIP contains an N-terminal region with homology to protein kinases, an intermediate domain capable of association with MAPKKK and a C-terminal region containing an intracellular death domain motif. RIP activates both p38 MAP Kinase and SAPK families.³ In-vitro, RIP induces apoptosis, as well as SAPK/JNK and NF- κ B activation. NF- κ B activation through TRADD, TRAF2 and RIP can be triggered also by DR3/APO3 upon activation with APO3/Tweak ligand. DR4 and DR5 also use FADD, TRADD, and RIP in their signal transduction pathways.⁴ RIP-deficient mice fail to thrive, displaying extensive apoptosis in both lymphoid and adipose tissues and dying at 1-3 days of age.⁵ RIP possesses kinase activity as it autophosphorylates itself on serine and threonine residues.

Reagents

The product is provided as affinity isolated antibody in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA and 15 mM sodium azide as a preservative.

Protein concentration is approximately 0.5 mg/ml by absorbance at 280 nm.

Precautions and Disclaimer

Due to the sodium azide content a material safety sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution.

Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage, freeze in working aliquots.

Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

A minimum working dilution of 1:400 is determined by immunoblotting using Jurkat human T cells extract.

Note: In order to obtain best results and assay sensitivity in different techniques and preparations we recommend determining optimal working dilutions by titration test.

References

1. Stanger, B.Z., et al., *Cell*, **81**, 513 (1995).
2. Hsu, H., et al., *Immunity*, **4**, 387 (1996).
3. Yuasa T., et al., *J. Biol. Chem.*, **273**, 22681 (1998).
4. Chaudhary, P.M., *Immunity*, **7**, 821 (1997).
5. Kelliher, M.A., *Immunity*, **8**, 297, (1998).

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