

Anti-IRAK-4 (RABBIT) Antibody - 600-401-953

Code: 600-401-953

Size: 100 µg

Product Description: Anti-IRAK-4 (RABBIT) Antibody - 600-401-953

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	IRAK4
Species Reactivity	human
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	interleukin 1 receptor associated kinase 4 mutant form 1 antibody, interleukin1 receptor associated kinase 4 antibody, IRAK 4 antibody, IRAK4 mutated form 1 antibody, NY REN 64 antibody, NY REN 64 antigen antibody, REN64 antibody
Application Note	This affinity-purified antibody has been tested for use in ELISA, immunohistochemistry and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 50 kDa in size corresponding to IRAK-4 protein by western blotting in the appropriate cell lysate or extract.
Background	IRAK-4 (Interleukin-1 receptor-associated kinase 4). Interleukin-1 (IL-1) and lipopolysaccharide (LPS) induces cellular responses through IL-1 receptor (IL-1R) and Toll-like receptors (TLR). IL-1R-associated kinases (IRAK, IRAK2, and IRAK-M) regulate the activation of NF-κB and MAP kinase (MAPK) by IL-1R/TLR (1-3). A novel member in the IRAK/Pelle family was recently identified and designated IRAK-4 (4,5). Overexpression of IRAK-4 activates NF-κB and MAPK pathways. IRAK-4 interacts with and phosphorylates IRAK-1. IRAK-4-deficient animals are completely resistant to challenge with LPS. Animals and humans lacking IRAK-4 are impaired in their responses to viral and bacterial challenges (5,6). Members of the IRAK/Pelle family play a central role in IL-1R/TLR mediated inflammatory responses and in innate immunity.
Purity And Specificity	This affinity-purified antibody is directed against human IRAK-4 protein. The product was purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross reactivity with IRAK-4 protein from human sources based on 100% homology with the immunizing sequence. No cross reactivity occurs against other IRAKs. Reactivity against homologues from other sources is not known.
Assay Dilutions	User Optimized
ELISA	1:5,000 - 1:20,000
Immunohistochemistry	1:100 - 1:500
WESTERN BLOT	1:250 - 1:1,000
IHC	1:100 - 1:500
OTHER ASSAYS	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the carboxy terminus of human IRAK-4 protein.
General Reference	<p>Cao Z, Henzel WJ and Gao X. IRAK: a kinase associated with the interleukin-1 receptor. Science 1996; 271:1128-31.</p> <p>Muzio M, Ni J, Feng P, et al. IRAK (Pelle) family member IRAK-2 and MyD88 as proximal mediators of IL-1 signaling. Science 1997; 278:1612-5.</p> <p>Wesche H, Gao X, Li X, et al. IRAK-M is a novel member of the Pelle/interleukin-1 receptor-associated kinase</p>

(IRAK) family. J. Biol. Chem. 1999; 274:19403-10.

Related Products

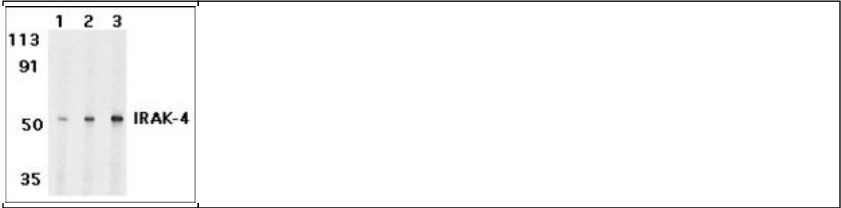
100-401-219	Anti-IKKa (RABBIT) Antibody - 100-401-219
100-401-219p	IKKa CONTROL PEPTIDE - 100-401-219p
100-401-220	Anti-IKKß (RABBIT) Antibody - 100-401-220
100-401-264	Anti-NFKB p65 (Rel A) pS276 (RABBIT) Antibody - 100-401-264

Related Links

Images

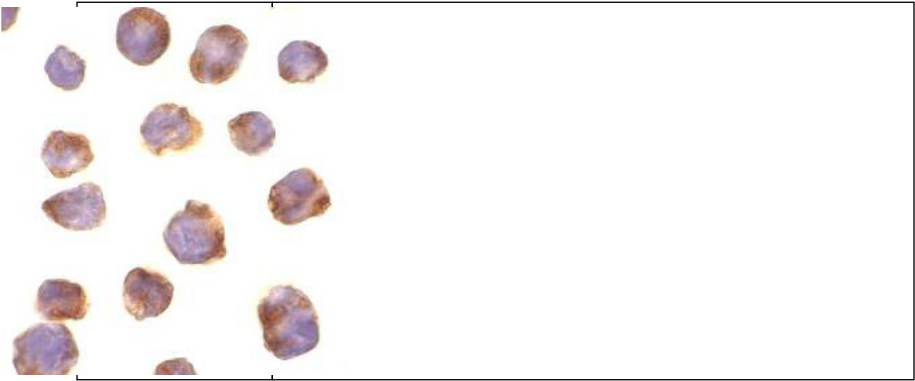
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Western blot using Rockland's affinity purified anti-IRAK-4 antibody shows detection of IRAK-4 in HeLa whole cell lysate. The membrane was probed with the primary antibody diluted to 1:1000 (lane 1), 1:500 (lane 2), and 1:250 (lane 3) respectively.



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Immunohistochemistry using Rockland's Affinity Purified anti-IRAK-4 antibody shows staining of IRAK-4 in HeLa cells. The cells were fixed with paraformaldehyde and reacted with the primary antibody diluted to 1:100.



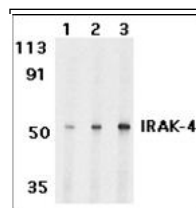
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Immunohistochemistry using Rockland's Affinity Purified anti-IRAK-4 antibody shows staining of IRAK-4 in HeLa cells. The cells were fixed with paraformaldehyde and reacted with the primary antibody diluted to 1:100.



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Western blot using Rockland's affinity purified anti-IRAK-4 antibody shows detection of IRAK-4 in HeLa whole cell lysate. The membrane was probed with the primary antibody diluted to 1:1000 (lane 1), 1:500 (lane 2), and 1:250 (lane 3) respectively.



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