

**Datasheet for 600-401-953****IRAK4 Antibody****Overview**

<b>Description:</b>	Anti-IRAK4 (RABBIT) Antibody - 600-401-953
<b>Item No.:</b>	600-401-953
<b>Size:</b>	100 µg
<b>Applications:</b>	ELISA, IF, IHC, WB
<b>Reactivity:</b>	Human
<b>Host Species:</b>	Rabbit

**Product Details**

<b>Background:</b>	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.
<b>Synonyms:</b>	IRAK-4, 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
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

**Target Details**

<b>Gene Name:</b>	IRAK4
<b>Reactivity:</b>	Human
<b>Immunogen Type:</b>	Conjugated Peptide

<b>Immunogen:</b>	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.
<b>Purity/Specificity:</b>	This affinity-purified antibody is directed against human IRAK-4 protein. The product is affinity chromatography purified via peptide column. 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.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">NCBI - 166795293</a></li><li>• <a href="#">UniProtKB - Q9NWZ3</a></li><li>• <a href="#">GenelD - 51135</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, IF, IHC, WB
<b>Application Note:</b>	This affinity-purified antibody has been tested for use in ELISA, immunocytochemistry, immunofluorescence, 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.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:5,000 - 1:20,000
<b>IF:</b>	10 µg/mL
<b>IHC:</b>	1:100 - 1:500
<b>WB:</b>	1:250 - 1:1,000

## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.02% (w/v) Sodium Azide
<b>Stabilizer:</b>	None

## Shipping & Handling

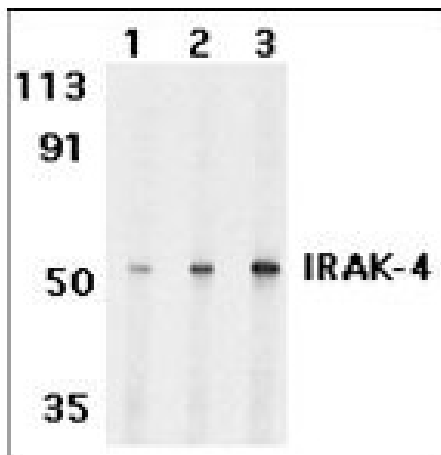
<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



### Immunohistochemistry

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.



### Western Blot

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.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.