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Datasheet for 600-401-953

IRAK4 Antibody

Overview

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

Product Details

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-kB 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-kB 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.
Synonyms:	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
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	IRAK4
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

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.
Purity/Specificity:	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.
Relevant Links:	• NCBI - 166795293 • UniProtKB - Q9NWZ3 • GeneID - 51135

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IF:	10 µg/mL
IHC:	1:100 - 1:500
WB:	1:250 - 1:1,000

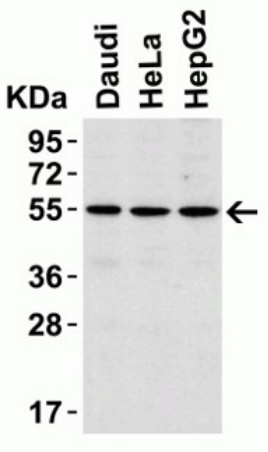
Formulation

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

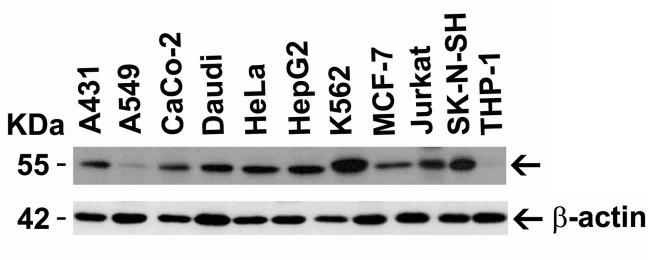
Shipping & Handling

Shipping Condition:	Dry Ice
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



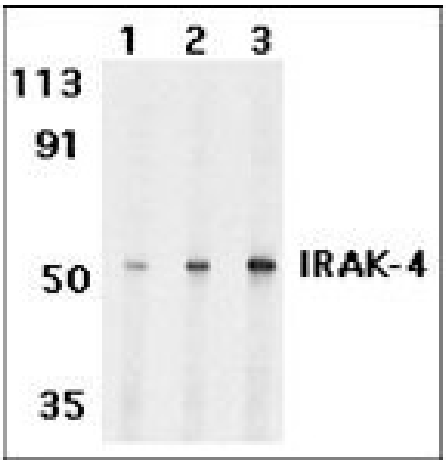
Western Blot
Western Blot Validation. Loading: 15 µg of Human Cell lysates per lane. Antibodies: IRAK4 (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot
Western Blot using IRAK4. Loading: 15 µg of lysates per lane. Antibodies: IRAK4 (1 µg/mL), beta-actin (1.5 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



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

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