

Datasheet for 600-401-BZ3**IRAK2 Antibody****Overview**

Description:	Anti-IRAK2 (RABBIT) Antibody - 600-401-BZ3
Item No.:	600-401-BZ3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background: The pro-inflammatory cytokine IL-1 induces cellular response through two subunits of its receptor, IL-1 receptor I (IL-1RI) and IL-1 receptor accessory protein (IL-1RAcP). IL-1 receptor-associated kinase (IRAK) mediates activation of NF-κB, which is a pivotal transcription factor mediating inflammatory and immune response. A novel member in the IRAK/Pelle family has been identified and designated IRAK2. Both IRAK and IRAK2 recruit to the subunits of the IL-1R complex after IL-1 binding and lead to NF-κB activation. IRAKs also associate with Toll like receptor (TLR) and the dominant negative mutants of IRAKs inhibit LPS-induced NF-κB activation. Members in IRAK/Pelle family play a central role in IL-1R and TLR mediated inflammatory response. Unlike human IRAK2, murine IRAK2 exists as four alternately spliced isoforms (IRAK2a-d), with two isoforms (IRAK2c and d) acting in an inhibitory fashion. IRAK2 is expressed in a variety of tissues.

Synonyms:	IRAK2 Antibody, IRAK-2, AI649099, 6330415L08Rik, Interleukin-1 receptor-associated kinase-like 2, IRAK-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Irak2
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-IRAK2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to 17 amino acids near the C-terminus of mouse IRAK2a which is common to all four isoforms.
Purity/Specificity:	Anti-IRAK2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Anti-IRAK2 has no cross response to IRAK. Anti-IRAK2 will also recognize human IRAK2.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - Q8CFA1• GeneID - 108960• NCBI - AAO24761

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-IRAK2 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 69 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:20,000
IF:	10 µg/mL
WB:	0.5-2 µg/mL

Formulation

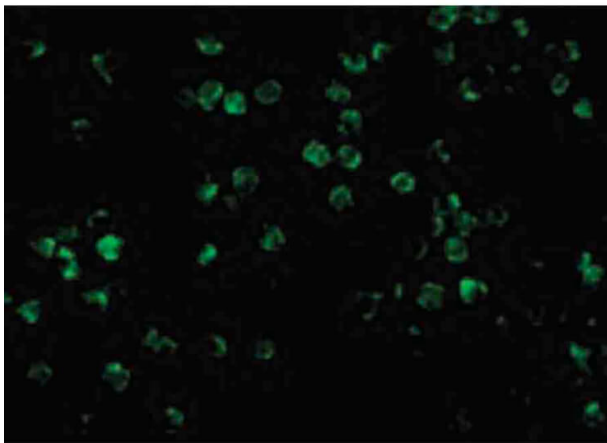
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

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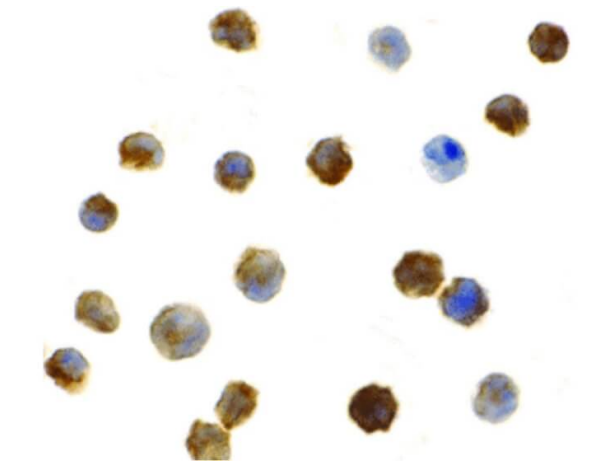
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted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

Images



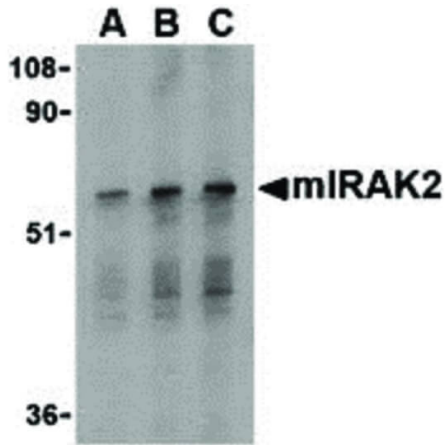
Immunofluorescence Microscopy

Immunofluorescence Microscopy of IRAK2 antibody. Cell Type: A20 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: IRAK2 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: IRAK2 is nuclear and cytoplasmic. Staining: IRAK2 as green fluorescent signal.



Immunohistochemistry

Immunocytochemistry of IRAK2 antibody. Cell Type: A-20 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: IRAK2 antibody at 1 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: IRAK2 is nuclear and cytoplasmic. Staining: IRAK2 is stained brown with hematoxylin purple counterstain.

**Western Blot**

Western Blot of IRAK2 antibody in RAW264.7 whole cell lysate. Lane A: IRAK2 antibody at 0.5 $\mu\text{g}/\text{mL}$. Lane B: IRAK2 antibody at 1 $\mu\text{g}/\text{mL}$. Lane C: IRAK2 antibody at 2 $\mu\text{g}/\text{mL}$. Load: 35 μg per lane. Primary antibody: IRAK2 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 69 kDa, 54 kDa for IRAK2. Other band(s): IRAK2 splice variants and isoforms.

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.