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-kB, 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-kB activation. IRAKs also associate with Toll like receptor (TLR) and the dominant negative mutants of IRAKs inhibit LPS-induced NF-kB 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:	• 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

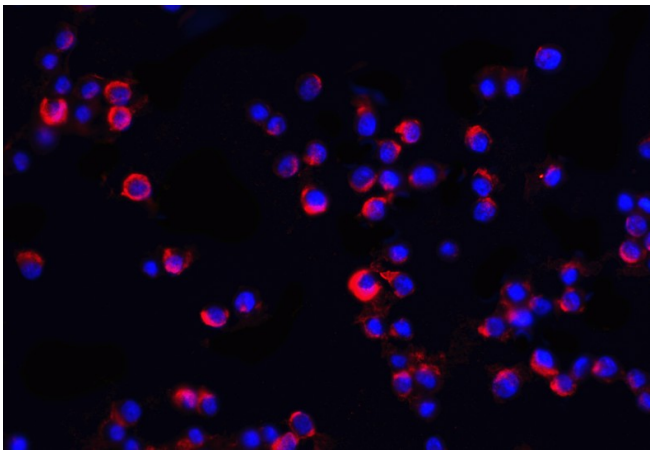
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

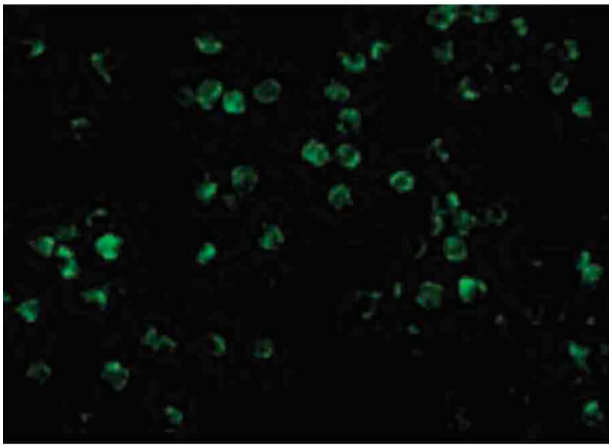
Shipping Condition:	Dry Ice

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.

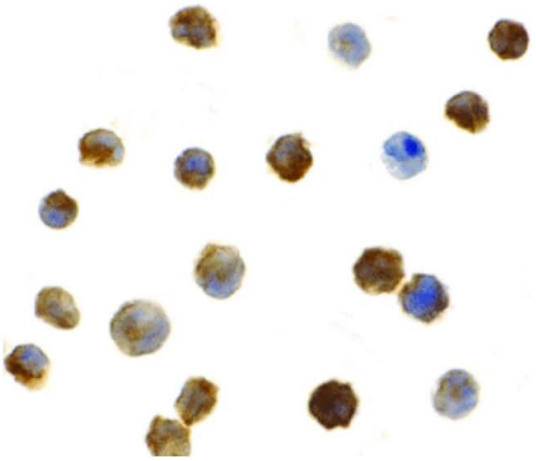
Images



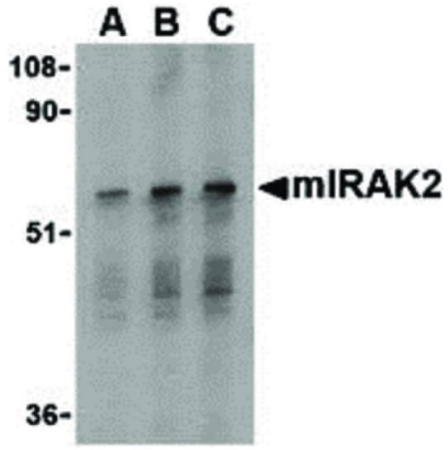
Immunofluorescence Microscopy
Immunofluorescence of IRAK-2 in Hela cells with IRAK 2 antibody at 20 µg/mL.
Red: IRAK2 Antibody.
Blue: DAPI staining.



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 µg/mL. Lane B: IRAK2 antibody at 1 µg/mL. Lane C: IRAK2 antibody at 2 µg/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

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