

**Datasheet for 200-301-BZ2****IRAK Antibody [8F1A7]****Overview**

|                      |                                          |
|----------------------|------------------------------------------|
| <b>Description:</b>  | Anti-IRAK (MOUSE) Antibody - 200-301-BZ2 |
| <b>Item No.:</b>     | 200-301-BZ2                              |
| <b>Size:</b>         | 100 µg                                   |
| <b>Applications:</b> | ELISA, IHC, WB                           |
| <b>Reactivity:</b>   | Human, Mouse                             |
| <b>Host Species:</b> | Mouse                                    |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Nuclear factor kappa B (NF-kappaB) is a ubiquitous transcription factor and an essential mediator of gene expression during activation of immune and inflammatory responses. NF-kB mediates the expression of a great variety of genes in response to extracellular stimuli including IL-1, TNFalpha and LPS. A serine/threonine protein kinase associated with IL-1 receptor (IRAK) and its homologue mouse pelle-like protein kinase (mPLK) were identified recently. IRAK is associated with the IL-1 receptor subunits IL-1RI and IL-1RAcP after IL-1 binding and serves as a signaling molecule to mediate IL-1 response. IRAK mediates a signaling cascade leading to NF-kB activation by members in IL-1 family including IL-1 and a novel cytokine IL-18 (also termed IGIF). |
| <b>Synonyms:</b>     | IRAK Antibody [8F1A7] , IRAK, pelle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host Species:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Clonality:</b>    | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Clone ID:</b>     | [8F1A7]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Format:</b>       | IgG1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Target Details**

|                        |                     |
|------------------------|---------------------|
| <b>Gene Name:</b>      | IRAK1               |
| <b>Reactivity:</b>     | Human, Mouse        |
| <b>Immunogen Type:</b> | Recombinant Protein |

|                            |                                                                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Anti-IRAK antibody was produced in mice by repeated immunizations with recombinant protein corresponding to amino acids 618 - 712 of human IRAK.                     |
| <b>Purity/Specificity:</b> | Anti-IRAK Monoclonal Antibody was Protein G purified. Cross reactivity with IRAK [8F1A7] from other sources has not been determined.                                 |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P51617</a></li><li>• <a href="#">GeneID - 3654</a></li><li>• <a href="#">NCBI - P51617</a></li></ul> |

## Application Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, IHC, WB                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Application Note:</b>    | Anti-IRAK Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry-P. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 77 kDa in Western Blots of specific cell lysates and tissues. WB validated in mouse samples and IHC validates in rat samples. All other applications and species not yet tested. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                            |
| <b>ELISA:</b>               | 1:10,000 - 1:20,000                                                                                                                                                                                                                                                                                                                                                                        |
| <b>IHC:</b>                 | 5 µg/mL                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>WB:</b>                  | 1-2 µg/mL                                                                                                                                                                                                                                                                                                                                                                                  |

## Formulation

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

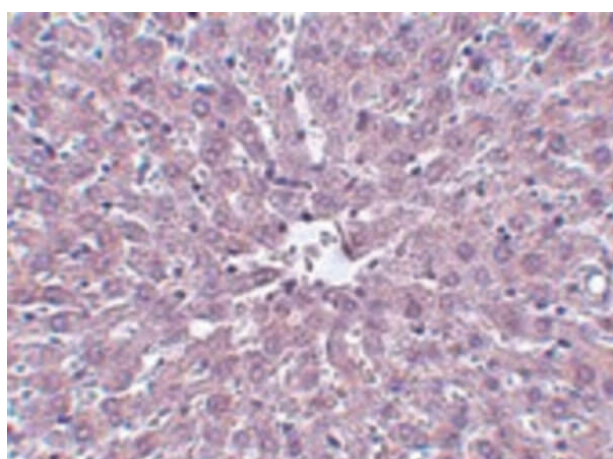
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

**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.

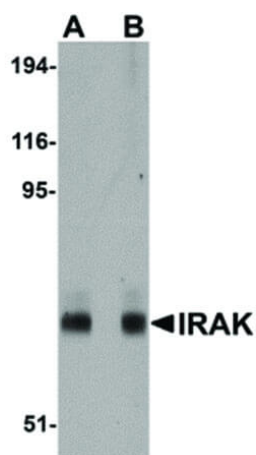
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### Immunohistochemistry

Immunohistochemistry of Mouse anti-IRAK antibody. Tissue: rat liver tissue. Primary antibody: IRAK antibody at 5 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:5,000. Localization: IRAK is cytoplasmic and nuclear.



### Western Blot

Western Blot of Mouse anti-IRAK antibody. Lane A: mouse liver lysate at 1 µg/mL. Lane B: mouse liver lysate at 2 µg/mL. Primary antibody: IRAK antibody overnight at 4°C. Secondary antibody: Mouse secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 77 kDa, 73 kDa for IRAK.

## 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.