

**Datasheet for 600-401-H15****RIG-1 Antibody****Overview**

|                      |                                            |
|----------------------|--------------------------------------------|
| <b>Description:</b>  | Anti-RIG-1 (RABBIT) Antibody - 600-401-H15 |
| <b>Item No.:</b>     | 600-401-H15                                |
| <b>Size:</b>         | 100 µg                                     |
| <b>Applications:</b> | ELISA, IHC, WB                             |
| <b>Reactivity:</b>   | Human, Mouse, Rat                          |
| <b>Host Species:</b> | Rabbit                                     |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | RIG-1 antibody detects the human RIG-1 protein. The innate immune system detects viral infection by recognizing various viral components and triggers antiviral responses. Like the toll-like receptor 3 (TLR3), the cytoplasmic helicase retinoic acid inducible gene protein 1 (RIG-1) recognizes double-stranded (ds) RNA, a molecular pattern associated with viral infection. Unlike TLR3 however, RIG-1 activates the kinases TBK1 and IKKε; through the adaptor protein IPS-1. These kinases then phosphorylate the transcription factors IRF-3 and IRF-7 which are essential for the expression of type-I interferons. RIG-1 is required for the production of interferons in response to RNA viruses including paramyxoviruses, influenza virus, and Japanese encephalitis virus. Anti-RIG-1 antibodies are ideal for investigators involved in infectious disease research. |
| <b>Synonyms:</b>     | Retinoic acid inducible gene 1 protein, RIG-I, Dead box protein 58, ddx58, Probable ATP-dependent RNA helicase DDX58, RIG-I-like receptor 1, RLR-1, RIG-1, Retinoic acid-inducible gene I protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

**Target Details**

|                        |                     |
|------------------------|---------------------|
| <b>Gene Name:</b>      | DDX58               |
| <b>Reactivity:</b>     | Human, Mouse, Rat   |
| <b>Immunogen Type:</b> | Recombinant Protein |

|                            |                                                                                                                                                                                                                                                                    |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | RIG-1 Antibody was produced from whole rabbit serum prepared by repeated immunizations with human GST-tagged RIG-1 protein.                                                                                                                                        |
| <b>Purity/Specificity:</b> | Anti-RIG-1 Antibody is Protein A purified. A BLAST analysis was used to suggest cross-reactivity with RIG-1 with Human, Rat and Mouse based on 100% homology with the immunizing sequence. Cross-reactivity with RIG-1 from other sources has not been determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">NCBI - NP_055129.2</a></li><li>• <a href="#">UniProtKB - O95786</a></li><li>• <a href="#">GeneID - 23586</a></li></ul>                                                                                         |

## Application Details

|                             |                                                                                                                                                                                                                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, IHC, WB                                                                                                                                                                                                                                                                       |
| <b>Application Note:</b>    | Anti-RIG-1 Antibody is tested for use in E, WB, and IHC. Expect a band approximately ~106.6 kDa on specific lysates. Western Blot tested in mouse samples and Immunohistochemistry in human and rat samples. Specific conditions for reactivity should be optimized by the end user. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                      |
| <b>IHC:</b>                 | 5µg/mL                                                                                                                                                                                                                                                                               |
| <b>WB:</b>                  | 0.5-2µg/mL                                                                                                                                                                                                                                                                           |

## Formulation

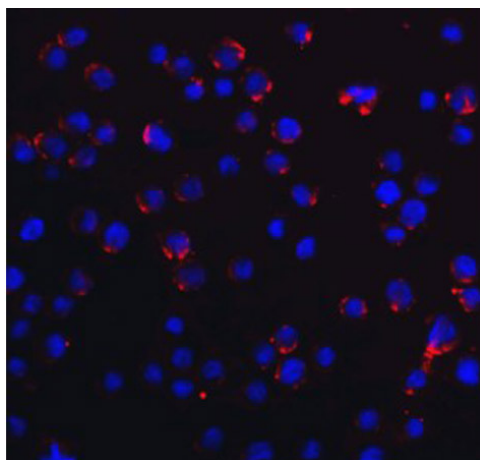
|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 1 mg/mL by UV absorbance at 280 nm                         |
| <b>Buffer:</b>         | 0.02 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. |

**Expiration:**

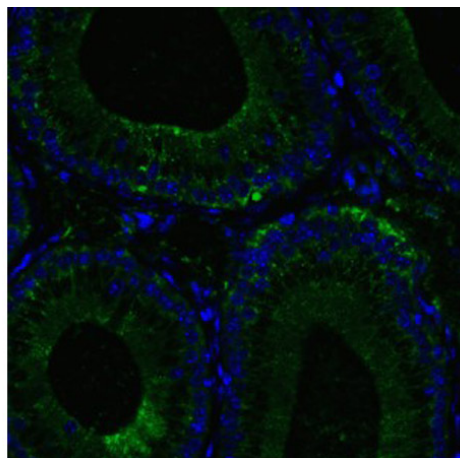
Expiration date is one (1) year from date of receipt.

**Images****Immunofluorescence Microscopy**

Immunofluorescence of RIG-1.

Cell: MCF7 cells.

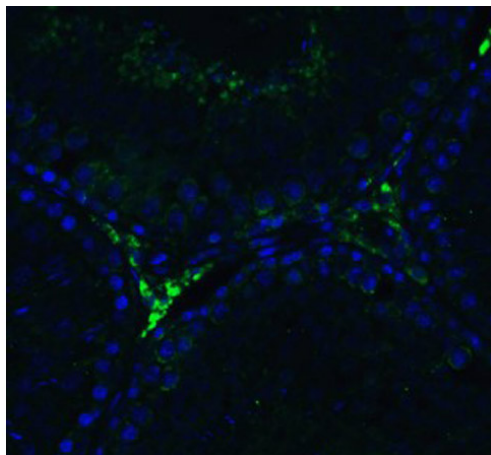
Primary Antibody: Anti-RIG-1 Antibody at 20 µg/mL.

**Immunofluorescence Microscopy**

Immunofluorescence of RIG-1.

Tissue: mouse testis tissue.

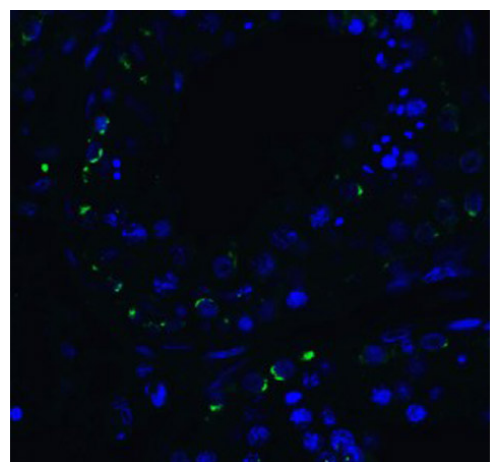
Primary Antibody: Anti-RIG-1 Antibody at 20 µg/mL.

**Immunofluorescence Microscopy**

Immunofluorescence of RIG-1.

Tissue: rat testis tissue.

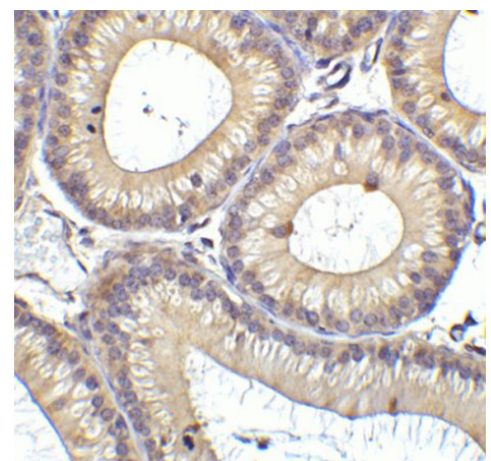
Primary Antibody: Anti-RIG-1 Antibody at 20 µg/mL.

**Immunofluorescence Microscopy**

Immunofluorescence of RIG-1.

Tissue: human testis tissue.

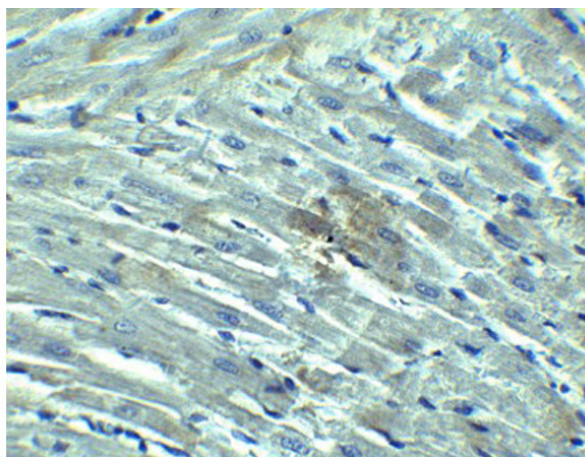
Primary Antibody: Anti-RIG-1 Antibody at 20 µg/mL.

**Immunohistochemistry**

Immunohistochemistry of RIG-1.

Tissue: mouse testis tissue.

Primary Antibody: Anti-RIG-1 Antibody at 1 µg/mL.

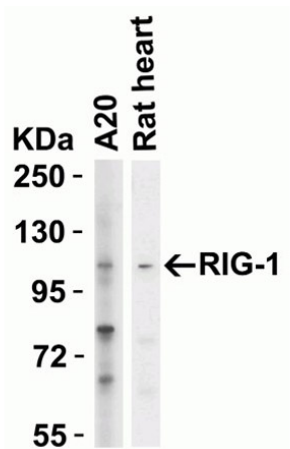


### Immunohistochemistry

Immunohistochemistry of RIG-1.

Tissue: rat heart tissue.

Primary Antibody: Anti-RIG-1 Antibody at 10 µg/mL.



### Western Blot

Western blot analysis of RIG-1.

Lane 1: A20 cell lysate and Lane 2: Rat heart tissue lysate.

Primary Antibody: Anti-RIG-1 antibody at 2 µg/mL.

## Disclaimer

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