

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

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

Product Details

Background:	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.
Synonyms:	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
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	DDX58
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein

Immunogen:	RIG-1 Antibody was produced from whole rabbit serum prepared by repeated immunizations with human GST-tagged RIG-1 protein.
Purity/Specificity:	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.
Relevant Links:	• NCBI - NP_055129.2 • UniProtKB - O95786 • GeneID - 23586

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	5µg/mL
WB:	0.5-2µg/mL

Formulation

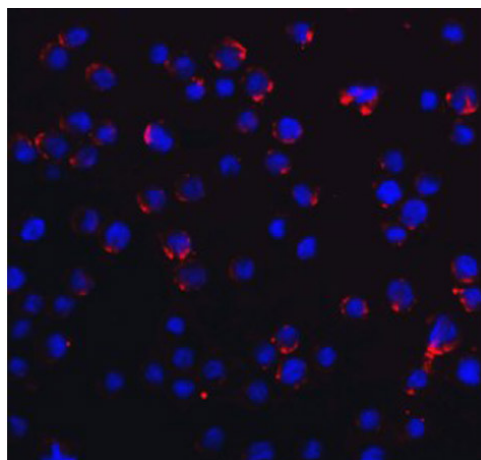
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

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:

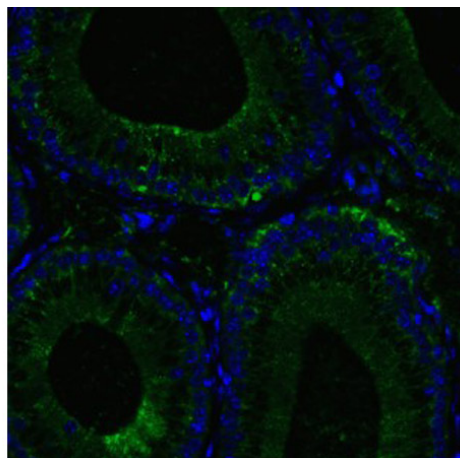
Expiration date is one (1) year from date of receipt.

Images**Immunofluorescence Microscopy**

Immunofluorescence of RIG-1.

Cell: MCF7 cells.

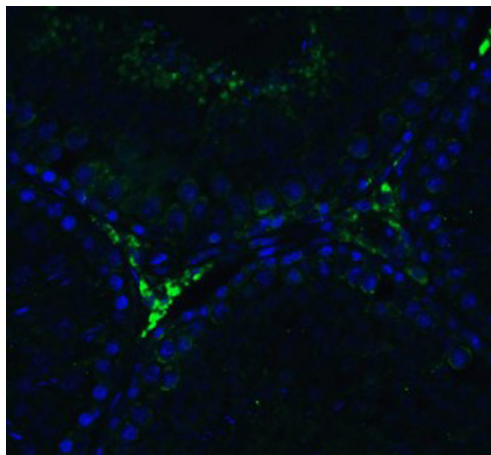
Primary Antibody: Anti-RIG-1 Antibody at 20 µg/mL.

**Immunofluorescence Microscopy**

Immunofluorescence of RIG-1.

Tissue: mouse testis tissue.

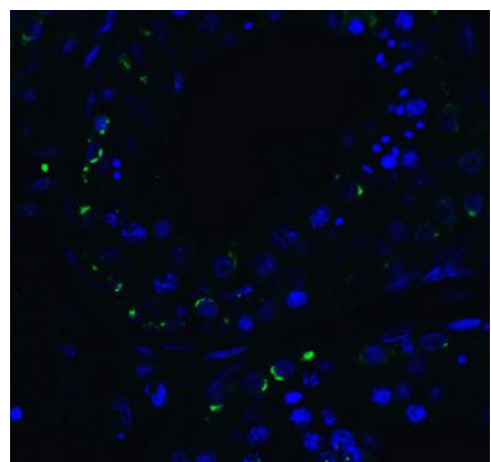
Primary Antibody: Anti-RIG-1 Antibody at 20 µg/mL.

**Immunofluorescence Microscopy**

Immunofluorescence of RIG-1.

Tissue: rat testis tissue.

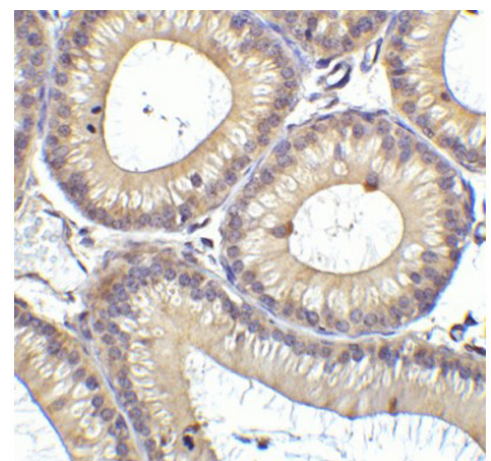
Primary Antibody: Anti-RIG-1 Antibody at 20 µg/mL.

**Immunofluorescence Microscopy**

Immunofluorescence of RIG-1.

Tissue: human testis tissue.

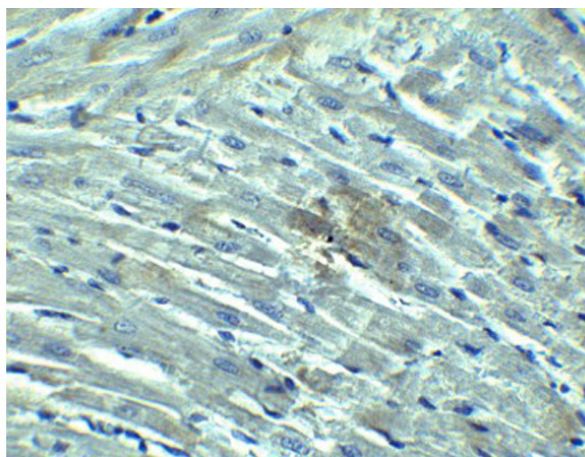
Primary Antibody: Anti-RIG-1 Antibody at 20 µg/mL.

**Immunohistochemistry**

Immunohistochemistry of RIG-1.

Tissue: mouse testis tissue.

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

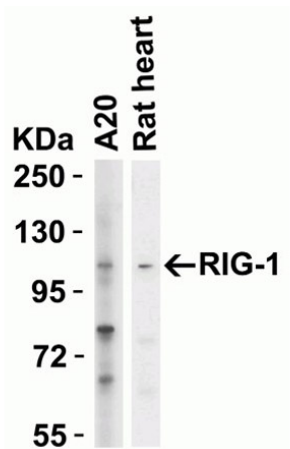


Immunohistochemistry

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

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.