

**Datasheet for 609-4617****Human IgG (H&L) Antibody Biotin Conjugated Pre-Adsorbed****Overview**

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| <b>Description:</b>  | Rabbit Anti-Human IgG (H&L) Antibody Biotin Conjugated (Min X MOUSE Serum Proteins) - 609-4617 |
| <b>Item No.:</b>     | 609-4617                                                                                       |
| <b>Size:</b>         | 2 mg                                                                                           |
| <b>Applications:</b> | ELISA, WB                                                                                      |
| <b>Reactivity:</b>   | Human                                                                                          |
| <b>Host Species:</b> | Rabbit                                                                                         |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| <b>Background:</b>   | Anti-Human IgG (H&L) Biotin generated in rabbit detects human Immunoglobulin G (IgG), both heavy and light chains of the antibody molecule are present. It is a protein complex composed of four peptide chains — two identical heavy chains and two identical light chains arranged in a Y-shape typical of antibody monomers. Each IgG has two antigen binding sites. Representing approximately 75% of serum immunoglobulins in humans, IgG is the most abundant antibody isotype found in the circulation. IgG molecules are synthesized and secreted by plasma B cells. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition. |
| <b>Synonyms:</b>     | Rabbit Anti Human IgG Biotin Conjugated Antibody, Rabbit Anti-Human IgG Antibody Biotin Conjugation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Specificity:</b>  | IgG (H&L)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Conjugate:</b>    | Biotin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

**Target Details**

|                    |       |
|--------------------|-------|
| <b>Reactivity:</b> | Human |
|--------------------|-------|

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|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Human IgG whole molecule                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purity/Specificity:</b> | This product was prepared from monospecific antiserum by immunoaffinity chromatography using Human IgG coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-biotin, anti-Rabbit Serum, Human IgG and Human Serum. No reaction was observed against Mouse Serum Proteins. |

## Application Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Tested Applications:</b> | ELISA, WB                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Application Note:</b>    | Anti-Human IgG (H&L) Biotin has been tested by ELISA and western blot and has been assayed against 1.0 ug of Human IgG in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:17,000 to 1:75,000 of the reconstitution concentration is suggested for this product. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                        |
| <b>ELISA:</b>               | 1:20,000 - 1:100,000                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>IHC:</b>                 | 1:1,000 - 1:5,000                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>WB:</b>                  | 1:2,000 - 1:10,000                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Formulation

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                            |
| <b>Concentration:</b>         | 2.0 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>          | 0.01% (w/v) Sodium Azide                                               |
| <b>Stabilizer:</b>            | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| <b>Reconstitution Volume:</b> | 1.0 mL                                                                 |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

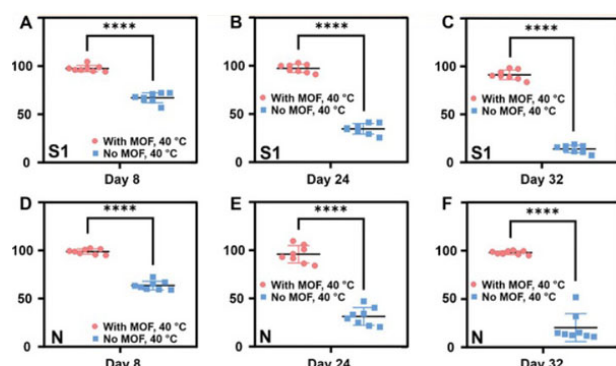
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Ambient |
|----------------------------|---------|

**Storage Condition:** Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. 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.

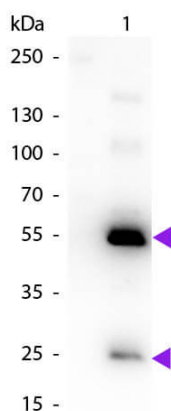
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### ELISA

Preservation efficacy of surface-bound (A-C) S1 protein and (D-F) N protein stored for different durations with ZIF-90 and without ZIF-90 encapsulation. (A-F) n=8, \*\*\*\*P < 0.0001, analyzed by unpaired t-test. Biotin-labeled anti human IgG was used as secondary antibody. Figure 4. PMID: 34297470.



### Western Blot

Western Blot of Biotin Conjugated Rabbit Anti-Human IgG Pre-Adsorbed Secondary Antibody. Lane 1: Human IgG. Lane 2: None. Load: 50 ng per lane. Primary antibody: Human IgG Antibody biotin conjugated at 1:1,000 for 60 min at RT. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:40,000 for 30 min at RT. Blocking: MB-070 for 30 min at RT. Predicted/Observed size: 25 & 55 kDa, 25 & 55 kDa for Human IgG. Other band(s): None.

## References

- Gupta R et al. Ultrasensitive lateral-flow assays via plasmonically active antibody-conjugated fluorescent nanoparticles. *Nat Biomed Eng.* (2023)
- Wang Y et al. Enhancing the Stability of COVID-19 Serological Assay through Metal-Organic Framework Encapsulation. *Adv Healthc Mater.* (2021)

## 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.