

**Datasheet for 611-156-122****Rabbit IgG (H&L) Antibody ATTO 647N Conjugated Pre-Adsorbed****Overview**

|                      |                                                                                                                                |
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| <b>Description:</b>  | Goat Anti-Rabbit IgG (H&L) Antibody ATTO 647N Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) - 611-156-122 |
| <b>Item No.:</b>     | 611-156-122                                                                                                                    |
| <b>Size:</b>         | 500 µg                                                                                                                         |
| <b>Applications:</b> | Dot Blot, WB, IF, IHC, Multiplex                                                                                               |
| <b>Reactivity:</b>   | Rabbit                                                                                                                         |
| <b>Host Species:</b> | Goat                                                                                                                           |

**Product Details**

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| <b>Background:</b>   | Anti-Rabbit IgG (H&L) ATTO 647N Antibody generated in goat detects reactivity to Rabbit IgG. Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the complement cascade, and opsonization for phagocytosis. The whole IgG molecule possesses both the F(c) region, recognized by high-affinity Fc receptor proteins, as well as the F(ab) region possessing the epitope-recognition site. Both the Heavy and Light chains of the antibody molecule are present. 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>     | Goat anti-Rabbit IgG Antibody ATTO647N Conjugation, Goat anti-Rabbit IgG ATTO 647N Conjugated Antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Host Species:</b> | Goat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Specificity:</b>  | IgG (H&L)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Conjugate:</b>    | ATTO 647N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>F/P Ratio:</b>    | 0.57                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Target Details

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <b>Reactivity:</b>         | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen:</b>          | Rabbit IgG whole molecule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purity/Specificity:</b> | Rabbit IgG (H&L) Antibody ATTO 647N was prepared from monospecific antiserum by immunoaffinity chromatography using Rabbit 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-Goat Serum, Rabbit IgG and Rabbit Serum. No reaction was observed against Bovine, Chicken, Goat, Guinea Pig, Hamster, Horse, Human, Mouse, Rat and Sheep Serum Proteins. This antibody will react with heavy chains of rabbit IgG and with light chains of most rabbit immunoglobulins. |

## Application Details

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| <b>Tested Applications:</b>    | Dot Blot, WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Suggested Applications:</b> | IF, IHC, Multiplex (Based on references)                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Application Note:</b>       | Anti-Rabbit IgG (H&L) conjugated to ATTO 647N has been tested by dot blot and western blot and is designed for STED microscopy, FRET, immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. The emission spectra for this ATTO conjugate matches the principle output wavelengths of most common fluorescence instrumentation. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>FLISA:</b>                  | >1:20,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>IF:</b>                     | >1:5,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>WB:</b>                     | >1:10,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Formulation

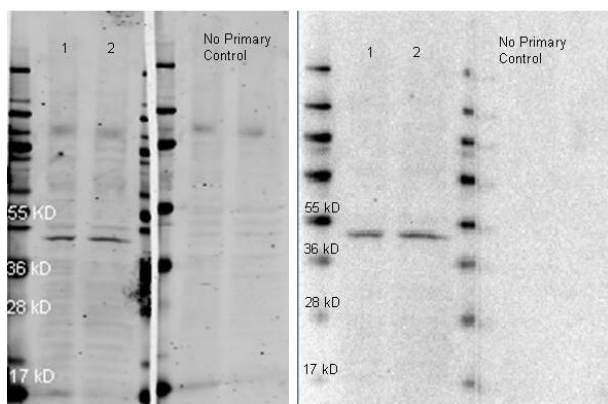
|                        |                                                                        |
|------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b> | Lyophilized                                                            |
| <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>   | 0.01% (w/v) Sodium Azide                                               |
| <b>Stabilizer:</b>     | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Reconstitution Volume:</b> | 500 $\mu$ L                                  |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent) |

## Shipping & Handling

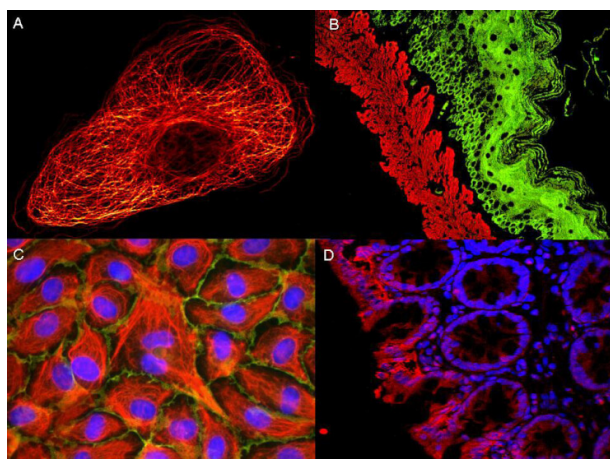
|                            |                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Condition:</b>  | 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. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

## Images



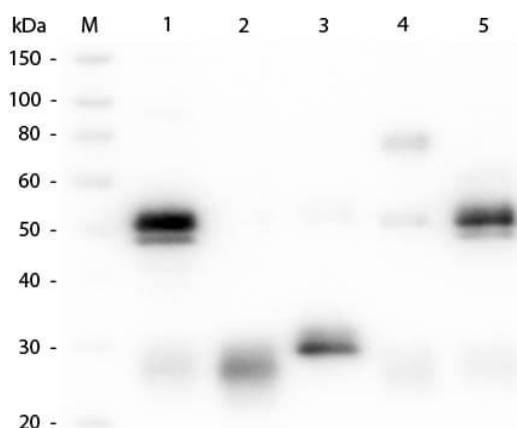
### Western Blot

Rockland ATTO 647N conjugated anti rabbit antibody was used to detect anti-Beta Actin antibody (p/n 600-401-886 lot 26928). Hela (Lane 1) and NIH 3T3 (Lane 2) Whole cell lysates were run on a 4-20% gel, transferred to nitrocellulose under standard conditions, and incubated with anti beta actin at a dilution of 1:2000 (ON 4°C). For secondary antibody detection, blot was incubated for 1 hr RT simultaneously with: 1. Rockland ATTO 647N conjugated anti rabbit antibody (p/n 611-156-122 lot 26426C, 1:10000 in MB-070, Shown on Left and 2. Rockland HRP conjugated anti rabbit IgG (611-1322 lot 19247, 1:10000 in MB-070, shown on right) Blot was dried, imaged at a wavelength of 700 nm on a LiCor Odyssey reader, rewetted in TBS and imaged after 2 min with a 30 sec exposure time using Rockland Femtomax-110 super sensitive Chemiluminescent substrate using the Biorad Versa Doc Imaging System.



### Immunofluorescence Microscopy

ATTO<sup>®</sup> dyes can be used for multicolor immunofluorescent detection with low background and high signal. Examples shown are: A. Tubulin in PtK2- male Rat Kangaroo Kidney Epithelial Cells was detected using ATTO 532 labeled secondary antibody. B. Muscle alpha-actin was stained with a mouse primary antibody and ATTO 488 anti-mouse IgG (green) while Cytokeratin was stained with polyclonal rabbit anti-cytokeratin and ATTO 647N anti-rabbit IgG (red). C. HUVEC (Human umbilical vein endothelial cells) were stained with anti- Vimentin-ATTO 532 (green), anti-E-Cadherin-ATTO 655 (red) and DAPI (blue). D. Rat colon sections were stained with Anti-Aquaporin 3-ATTO 594 antibody. Hoechst 33342 (blue) is used as counterstain. Images provided courtesy of Dr. Jörg Reichwein, ATTO-TEC GmbH



### Western Blot

Western Blot of Unconjugated Anti-Rabbit IgG (H&L) (GOAT) Antibody (Min X Bv, Ch, Gt, GP, Ham, Hs, Hu, Ms, Rt & Sh Serum Proteins) (p/n 611-101-122). Lane M: 3 µl Molecular Ladder. Lane 1: Rabbit IgG whole molecule (p/n 011-0102). Lane 2: Rabbit IgG F(ab) Fragment (p/n 011-0105). Lane 3: Rabbit IgG F(c) Fragment (p/n 010-0103). Lane 4: Rabbit IgM Whole Molecule (p/n 011-0107). Lane 5: Normal Rabbit Serum (p/n B309). All samples were reduced. Load: 50 ng per lane. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Rabbit IgG (H&L) (GOAT) Antibody (Min X Bv, Ch, Gt, GP, Ham, Hs, Hu, Ms, Rt & Sh Serum Proteins) (p/n 611-101-122) 1:1,000 for 60 min at RT. Secondary antibody: Anti-Goat IgG (DONKEY) Peroxidase Conjugated Antibody (p/n CUST10) 1:40,000 in MB-070 for 30 min at RT. Predicted/Observed Size: 25 and 50 kDa for Rabbit IgG and Serum, 25 kDa for F(c) and F(ab), 70 and 23 kDa for IgM. Rabbit F(c) migrates slightly higher.

## References

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## Disclaimer

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