



## Anti-RABBIT IgG (H&L) (GOAT) Antibody ATTO 425 Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) - 611-151-122

**Code:** 611-151-122

**Size:** 500 µg

**Product Description:** Anti-RABBIT IgG (H&L) (GOAT) Antibody ATTO 425 Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) - 611-151-122

**Concentration:** 1.0 mg/mL by UV absorbance at 280 nm

**PhysicalState:** Lyophilized

<b>Label</b>	ATTO 425
<b>Host</b>	Goat
<b>Emission Wavelength</b>	484
<b>Excitation Wavelength</b>	436
<b>Buffer</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Reconstitution Volume</b>	500 µL
<b>Reconstitution Buffer</b>	Restore with deionized water (or equivalent)
<b>Stabilizer</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
<b>Preservative</b>	0.01% (w/v) Sodium Azide
<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>Synonyms</b>	Goat anti-Rabbit IgG Antibody ATTO425 Conjugation, Goat anti-Rabbit IgG ATTO 425 Conjugated Antibody
<b>Application Note</b>	Anti-Rabbit IgG (H&L) conjugated to ATTO 425 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>Background</b>	Anti-Rabbit IgG (H&L) ATTO 425 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>Purity And Specificity</b>	Rabbit IgG (H&L) Antibody ATTO 425 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.
<b>Assay Dilutions</b>	User Optimized
<b>Western Blot</b>	>1:10,000
<b>FLISA</b>	>1:20,000
<b>IF Microscopy</b>	>1:5,000
<b>Other Assays</b>	User Optimized
<b>Expiration</b>	Expiration date is one (1) year from date of opening.
<b>Immunogen</b>	Rabbit IgG whole molecule

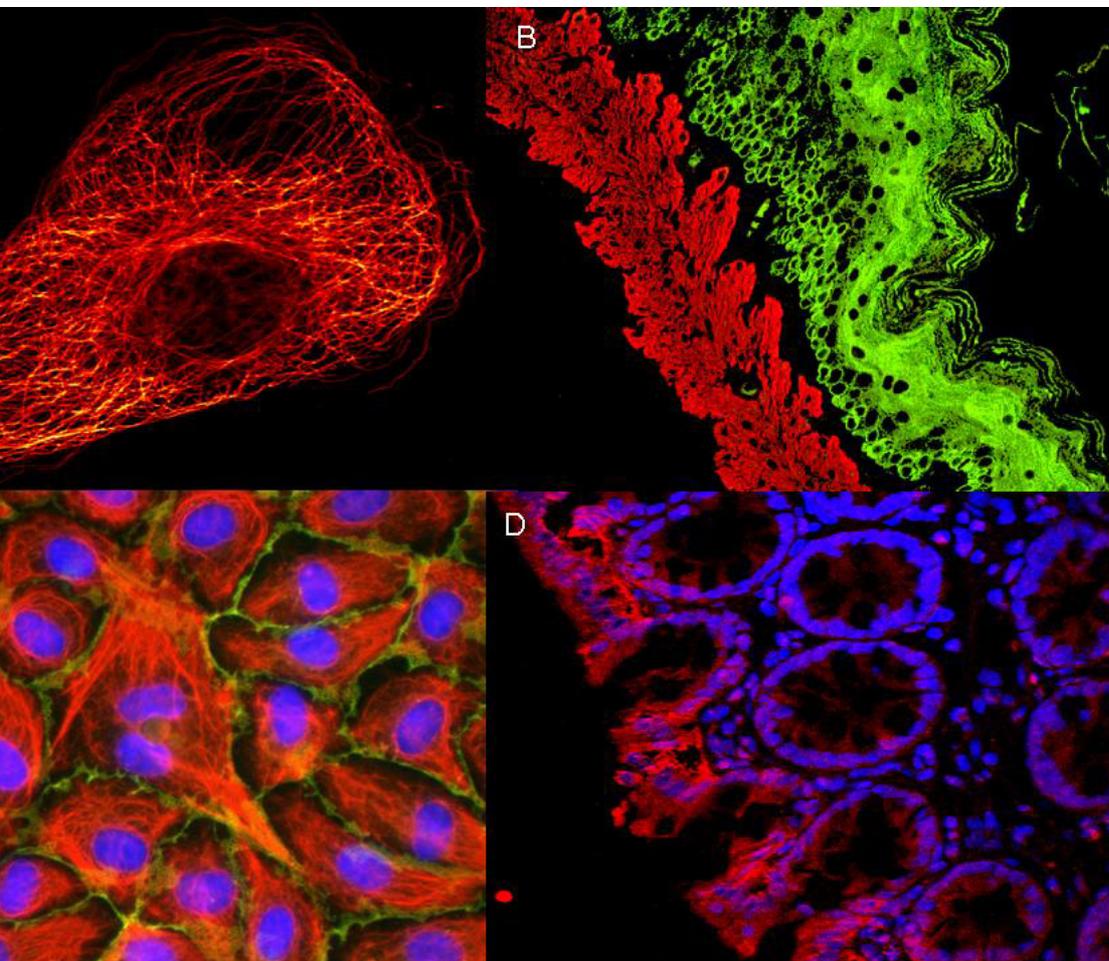
## Related Products

B304	NORMAL GOAT SERUM (NGS) - B304
BSA-30	BOVINE SERUM ALBUMIN 30% Solution - BSA-30
MB-070	Blocking Buffer for Fluorescent Western Blotting - MB-070
MB-071-0100	Blocking Buffer for Immunohistochemistry - Serum and Azide Free - MB-071-0100

## Images

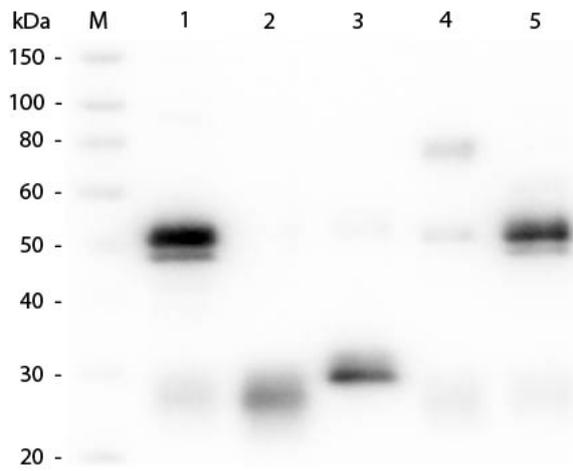
1

ATTO® 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



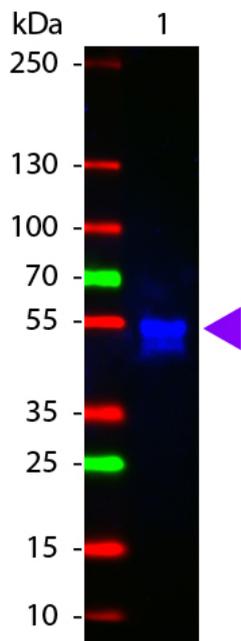
2

Western Blot of 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.



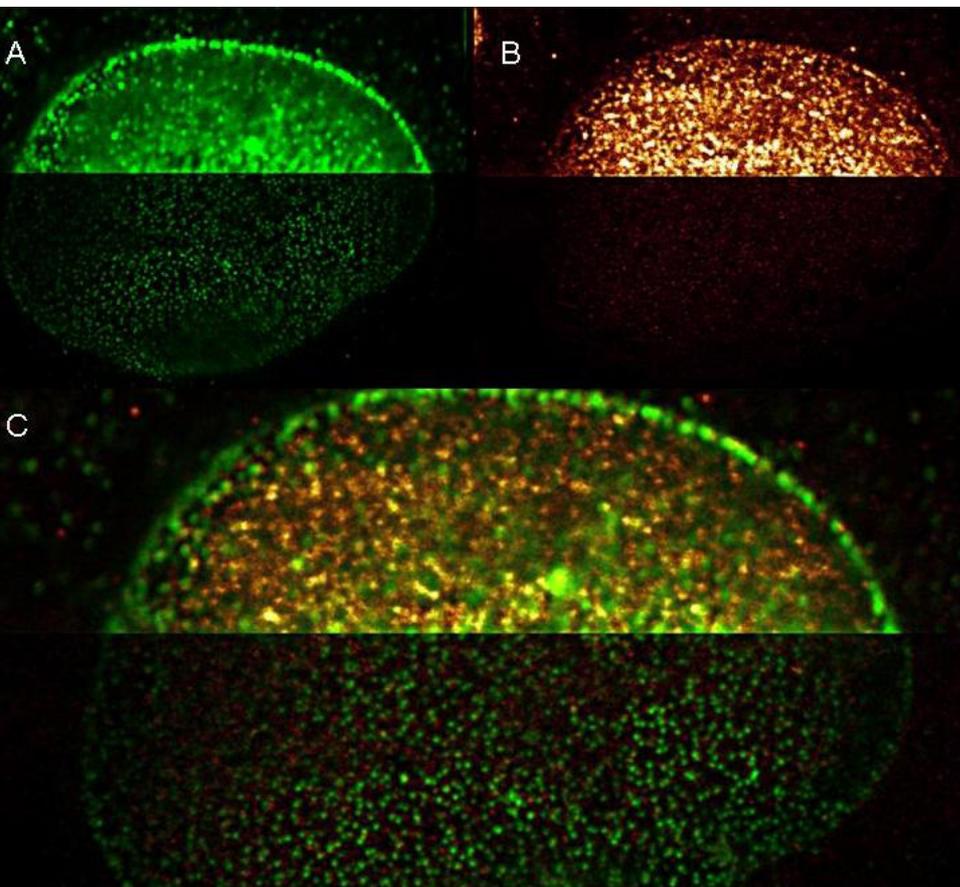
3

Western Blot of ATTO 425 conjugated Goat anti-Rabbit IgG antibody. Lane 1: Rabbit IgG. Lane 2: none. Load: 50 ng per lane. Primary antibody: none. Secondary antibody: ATTO 425 rabbit secondary antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min RT. Predicted/Observed size: 55 kDa, 28 kDa/55 kDa for Rabbit IgG. Other band(s): none.



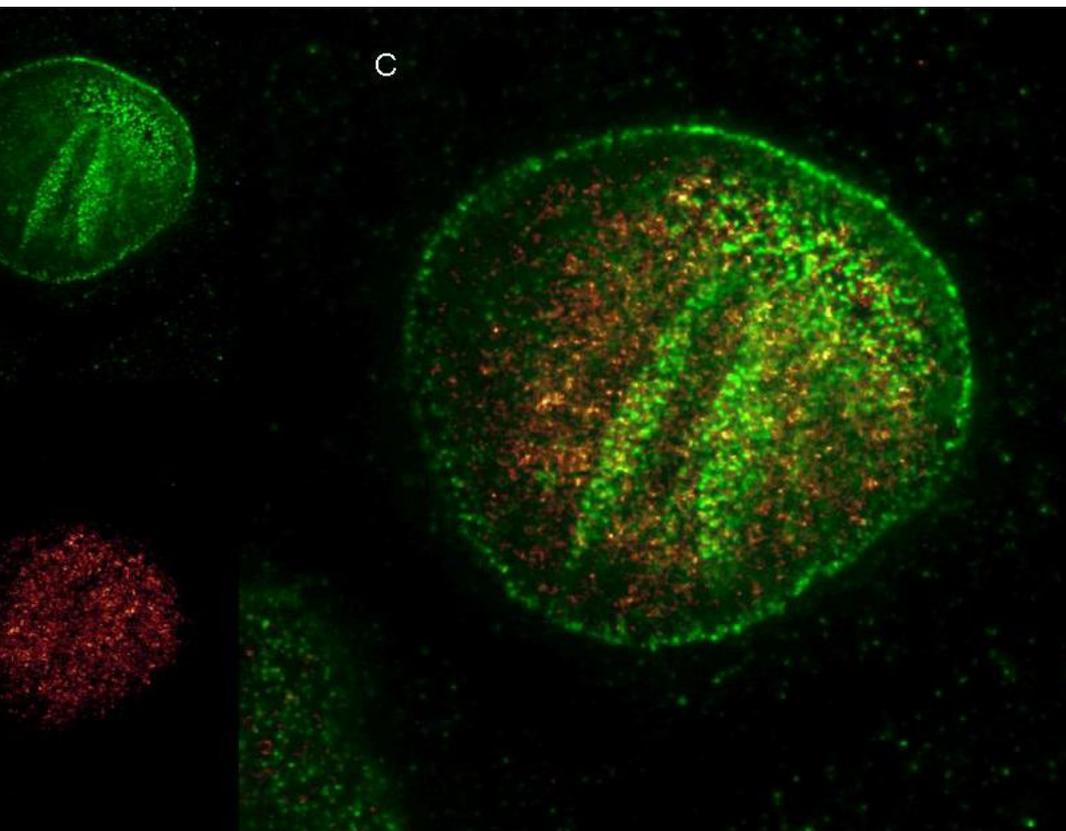
4

Rockland Dylight and ATTO@dye conjugated antibodies provide high signal and low background for confocal microscopy (upper images) and high resolution Stimulated Emission Depletion (STED) Microscopy (lower images). Both Dylight and Atto conjugated secondary antibodies maintained robust, intense signal during repeated laser excitation and de-excitation used during STED microscopy. Shown here are: A. (Green) Mouse anti NuP (NuP=Nuclear Pore Protein) detected with Dylight 488 Goat anti mouse (610-141-121)B. (Red) Rabbit Anti Ezh1/2 Pab (Ezh=enhancer of zeste homology) with detection by Rockland ATTO @425 conjugated Goat anti Rabbit (611-151-122)(Red and Green) Images combined. Data was collected on a STED-CW TCS-SP5 Confocal system (Leica Microsystems) equipped with a DFC 350FX Camera allowing sequential acquisition in widefield, confocal and STED CW imaging modes and provided courtesy of: Myriam Gastard, PhD, personal communication, Leica Microsystems, Inc. USA



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Rockland DyLight and ATTO dye conjugated antibodies provide high signal and low background for confocal microscopy and high resolution Stimulated Emission Depletion (STED) Microscopy. Both DyLight and Atto conjugated secondary antibodies maintained robust, intense signal during repeated laser excitation and de-excitation used during STED microscopy. Shown here are: A. (Green) Mouse anti NuP (NuP=Nuclear Pore Protein) detected with DyLight 488 Goat anti mouse (610-141-121) B. (Red) Rabbit Anti Ezh1/2 Pab (Ezh=enhancer of zeste homology) with detection by Rockland ATTO 425 conjugated Goat anti Rabbit (611-151-122) C. (Red and Green) Images combined. Data was collected on a STED-CW TCS-SP5 Confocal system (Leica Microsystems) equipped with a DFC 350FX Camera allowing sequential acquisition in wide-field, confocal and STED CW imaging modes and provided courtesy of: Myriam Gastard, PhD, personal communication, Leica Microsystems, Inc. USA



#### **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.