

Datasheet for 612-152-120S**Rat IgG (H&L) Antibody ATTO 488 Conjugated Pre-Adsorbed****Overview**

Description:	Goat Anti-Rat IgG (H&L) Antibody ATTO 488 Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rb & Sh Serum Proteins) - 612-152-120S
Item No.:	612-152-120S
Size:	100 µg
Applications:	Dot Blot, WB
Reactivity:	Rat
Host Species:	Goat

Product Details

Background:	Anti-Rat IgG (H&L) conjugated to ATTO 488 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.
Synonyms:	Goat anti-Rat IgG ATTO488 Conjugated Antibody, Goat anti-Rat IgG Antibody ATTO 488 Conjugation
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	ATTO 488
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.5

Target Details

Reactivity:	Rat
Immunogen:	Rat IgG whole molecule

Purity/Specificity:	Rat IgG (H&L) Antibody ATTO 488 was prepared from monospecific antiserum by immunoaffinity chromatography using Rat 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, Rat IgG and Rat Serum. No reaction was observed against Bovine, Chicken, Goat, Guinea Pig, Hamster, Horse, Human, Mouse, Rabbit and Sheep Serum Proteins. This antibody will react with heavy chains of rat IgG and with light chains of most rat immunoglobulins.
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Application Details

Tested Applications:	Dot Blot, WB
Application Note:	Anti-Rat IgG (H&L) conjugated to ATTO 488 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. The emission spectra for this ATTO conjugate matches the principle output wavelengths of most common fluorescence instrumentation.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FLISA:	>1:20,000
IF:	>1:5,000
WB:	>1:10,000

Formulation

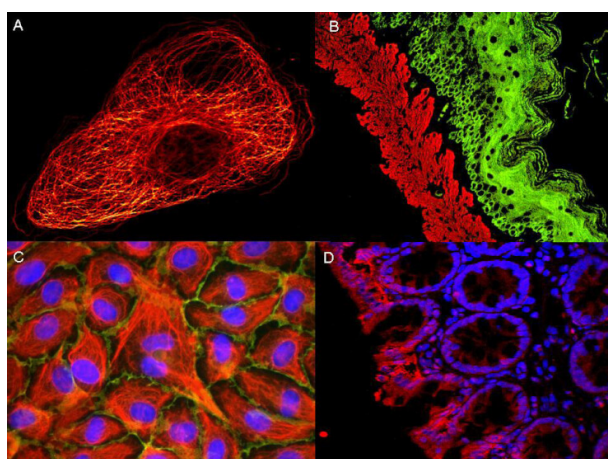
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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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

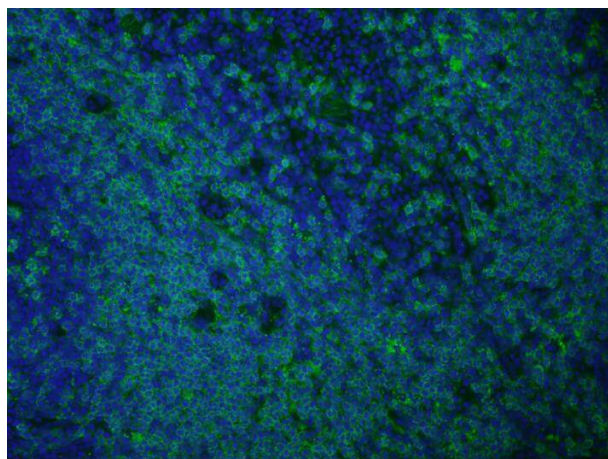


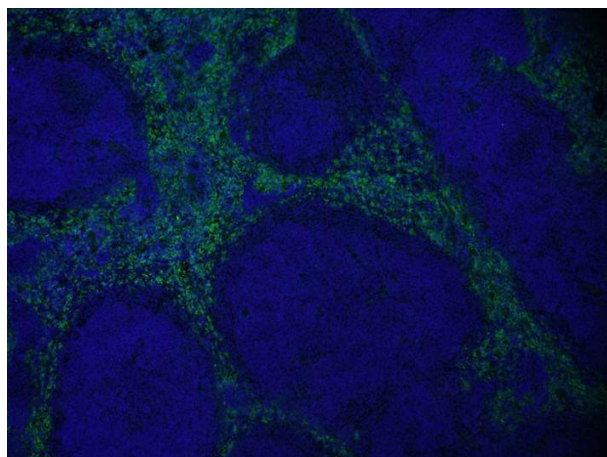
Immunofluorescence Microscopy

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

Immunofluorescence Microscopy

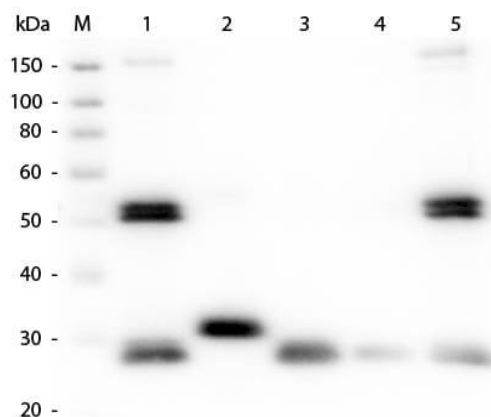
Immunofluorescence of anti rat IgG antibody Tissue: Normal mouse spleen Fixation: methanol frozen Antigen retrieval: user optimized Primary antibody: AbD Serotec's Rat anti-mouse CD3 antibody (KT3 clone). (1mg/ml) Secondary antibody: ATTO dye 488 anti-rat IgG (612-152-120) 1:200 dilution) Localization: CD3+ populations throughout the spleen of a normal mouse Staining: antibody as green fluorescent signal with a DAPI blue nuclear counterstain (Rebecca Evans, The University of Pennsylvania School of Medicine)





Immunofluorescence Microscopy

Immunofluorescence of anti rat IgG antibody Tissue: Normal mouse spleen Fixation: user optimized Antigen retrieval: user optimized Primary antibody: rat anti-mouse primary antibody (clone BM8 from eBioscience) against F4/80 (1:100 dilution) Secondary antibody: ATTO dye 488 anti-rat IgG (612-152-120) 1:200 dilution) Localization: macrophage populations throughout the spleen of a normal mouse Staining: antibody as green fluorescent signal with a DAPI blue nuclear counterstain. (Rebecca Evans, The University of Pennsylvania School of Medicine)



Western Blot

Western Blot of Anti-Rat IgG (H&L) (GOAT) Antibody (Min X Bv Ch Gt GP Ham Hs Hu Ms Rb & Sh Serum Proteins) (p/n 612-101-120). Lane M: 3 µl Molecular Ladder. Lane 1: Rat IgG whole molecule (p/n 012-0102). Lane 2: Rat IgG F(c) Fragment (p/n 012-0103). Lane 3: Rat IgG Fab Fragment (p/n 012-0105). Lane 4: Rat IgM Whole Molecule (p/n 012-0107). Lane 5: Rat Serum (p/n D310-05). All samples were reduced. Load: 50 ng per lane. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Rat IgG (H&L) (GOAT) Antibody (Min X Bv Ch Gt GP Ham Hs Hu Ms Rb & Sh Serum Proteins) (p/n 612-101-120) 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 55 kDa for Rat IgG and Serum, 25 kDa for F(c) and Fab, 78 and 25 kDa for IgM. Rat F (c) migrates slightly higher.

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.