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Datasheet for 610-455-C46

Mouse IgG (gamma 1, 2a, 2b and 3 chain) Antibody ATTO 594 Conjugated

Overview

Description:	Rabbit Anti-Mouse IgG (gamma 1, 2a, 2b and 3 chain) Antibody ATTO 594 Conjugated - 610-455-C46
Item No.:	610-455-C46
Size:	500 µg
Applications:	WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Anti-Mouse IgG ATTO 594 Antibody generated in rabbit detects reactivity to Mouse IgG1, IgG2a, IgG2b and IgG3. 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 compliment 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. IgG1, IgG2a, IgG2b and IgG3 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.
Synonyms:	rabbit anti-Mouse IgG (gamma 1, 2a, 2b and 3 chain) Antibody ATTO594 conjugation, rabbit anti-Mouse IgG ATTO594 conjugated Antibody
Host Species:	Rabbit
Specificity:	IgG (gamma 1, 2a, 2b and 3 chain)
Conjugate:	ATTO 594
Clonality:	Polyclonal
Format:	IgG

F/P Ratio:	2.9

Target Details

Reactivity:	Mouse
Immunogen Type:	Native Protein
Immunogen:	highly purified mouse IgG gamma 1, gamma 2a, gamma 2b and gamma 3 proteins
Purity/Specificity:	Mouse IgG (gamma 1, 2a, 2b and 3 chain) Antibody ATTO 594 was prepared from monospecific antiserum by immunoaffinity chromatography using antigens coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. This product shows balanced reactivity to Mouse IgG1, IgG2a, IgG2b and IgG3 proteins and is suitable to screen IgG class hybridoma clones. Minimal cross reactivity is observed against other Mouse immunoglobulin classes or light chain proteins.

Application Details

Tested Applications:	WB
Application Note:	Anti-Mouse IgG (gamma 1, 2a, 2b and 3 chain) conjugated to ATTO 594 has been tested by 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.
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

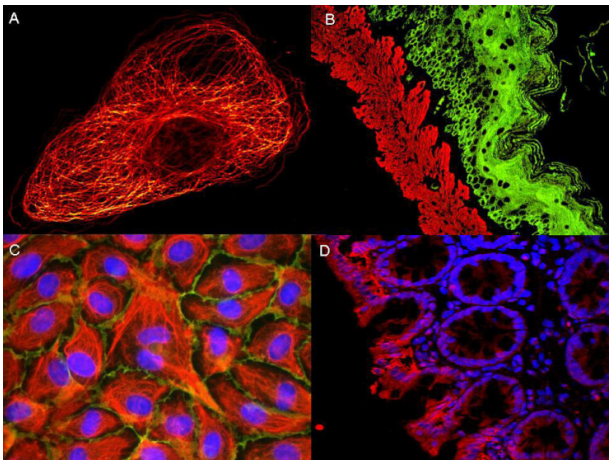
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Reconstitution Volume:	500 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

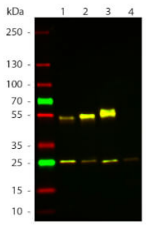
Shipping & Handling

Shipping Condition:	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



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



Western Blot

Western Blot of ATTO 594 Rabbit Anti-Mouse IgG (gamma 1, 2a, 2b, 3) secondary antibody. Lane 1: Mouse IgG1. Lane 2: Mouse IgG2a. Lane 3: Mouse IgG2b. Lane 4: Mouse IgG3. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: ATTO 594 rabbit secondary antibody at 1:1,000 for 60 min at RT. Blocking: MB-070 for 30 min at RT. Predicted/Observed size: 25 & 55 kDa, 25 & 55 kDa for Mouse IgG Subclasses. Other band(s): None.

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.