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Datasheet for 610-152-041

Mouse IgG2a Antibody ATTO 488 Conjugated Pre-adsorbed

Overview

Description:	Goat Anti-Mouse IgG2a (Gamma 2a chain) Antibody ATTO 488 Conjugated (Min X Bv, Hu, and Rb Serum Proteins) - 610-152-041
Item No.:	610-152-041
Size:	500 µg
Applications:	Dot Blot, IF, IHC
Reactivity:	Mouse
Host Species:	Goat

Product Details

Background:	Anti-Mouse IgG2a ATTO 488 Antibody generated in goat detects reactivity to Mouse IgG2a (Gamma 2a chain). Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. IgG2, the second largest of IgG isotypes, comprises almost 25% of IgG and has a low affinity for binding to the Fc receptor of phagocytic 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.
Synonyms:	Goat anti-mouse IgG2a antibody ATTO488 conjugation, goat anti-mouse IgG2a (gamma 2a) ATTO 488 conjugated antibody
Host Species:	Goat
Specificity:	IgG2a
Conjugate:	ATTO 488
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	4.0

Target Details

Reactivity:	Mouse

Immunogen Type:	Native Protein
Immunogen:	Mouse IgG2a heavy chain
Purity/Specificity:	MOUSE IgG2a Antibody 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. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Mouse Serum and Mouse IgG2a. Specificity was confirmed by ELISA at less than 1% cross-reactivity against other mouse heavy or light chain isotypes. No reaction was observed against Bovine, Human, and Rabbit Serum Proteins. Specificity was confirmed by ELISA at less than 1% of target signal.

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	IF, IHC (Based on references)
Application Note:	Anti-Mouse IgG2a ATTO 488 Antibody has been tested by dot blot. Mouse IgG2a secondary antibody is available in a variety of formats. ATTO 488 Conjugated antibodies are 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. Anti-Mouse IgG2a secondary antibody is suitable for ELISA, Immunohistochemistry western blotting as well as other anti IgG2a antibody based assays. 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.
FC:	1:500 - 1:2,500
FLISA:	>1:20,000
IF:	>1:5,000
WB:	1:4,000 - 1:20,000

Formulation

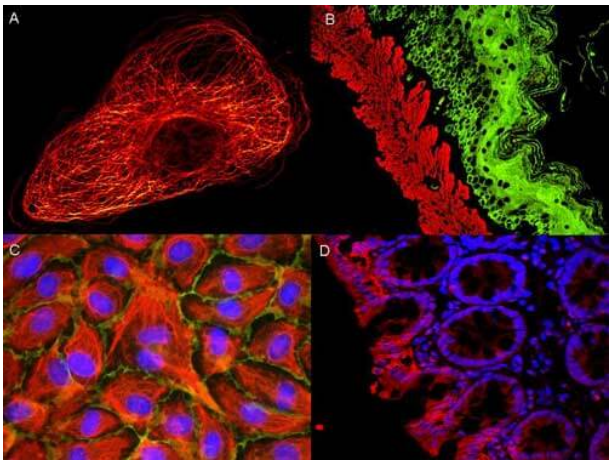
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

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

References

- Mascadri F et al. Background-free Detection of Mouse Antibodies on Mouse Tissue by Anti-isotype Secondary Antibodies. *J Histochem Cytochem.* (2021)
- Lim J et al. Nuclear proximity of Mtr4 to RNA exosome restricts DNA mutational asymmetry. *Cell.* (2017)

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.