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Datasheet for 605-453-013

Goat IgG (H&L) Antibody ATTO 532 Conjugated Pre-Adsorbed

Overview

Description:	Rabbit Anti-Goat IgG (H&L) Antibody ATTO 532 Conjugated (Min X Hu, Ms, Rb Serum Proteins) - 605-453-013
Item No.:	605-453-013
Size:	500 µg
Applications:	WB, IF
Reactivity:	Goat
Host Species:	Rabbit

Product Details

Background:	Anti-Goat IgG ATTO dye Antibody generated in rabbit detects goat 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 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. Both heavy and light chains of the antibody molecule are present.
Synonyms:	rabbit anti-Goat IgG ATTO 532 Conjugated Antibody, rabbit anti-Goat IgG Antibody ATTO532 Conjugation
Host Species:	Rabbit
Specificity:	IgG (H&L)
Conjugate:	ATTO 532
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	3.2

Target Details

Reactivity:	Goat

Immunogen:	Goat IgG whole molecule
Purity/Specificity:	Goat IgG (H&L) conjugated to ATTO 532 was prepared from monospecific antiserum by immunoaffinity chromatography using Goat 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-Rabbit Serum, Goat IgG and Goat Serum. No reaction was observed against Human, Mouse or Rabbit Serum Proteins. This antibody will react with heavy chains of Goat IgG and with light chains of most Goat immunoglobulins.

Application Details

Tested Applications:	WB
Suggested Applications:	IF (Based on references)
Application Note:	Anti-Goat IgG (H&L) conjugated to ATTO 532 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

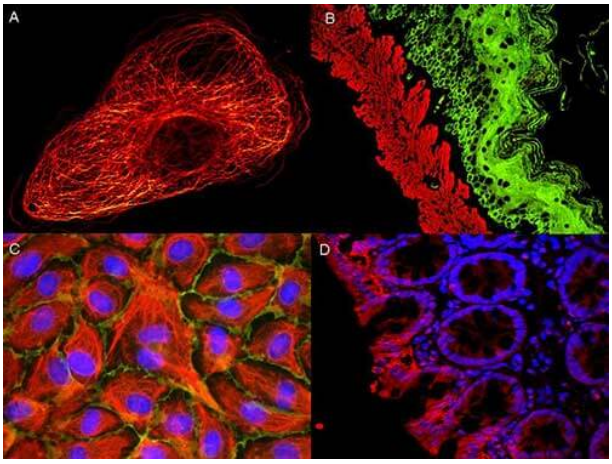
Formulation

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)

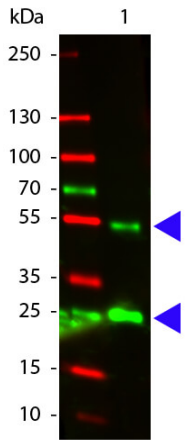
Shipping & Handling

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 532 conjugated Rabbit anti-Goat IgG antibody. Lane 1: Goat IgG. Lane 2: none. Load: 50 ng per lane. Primary antibody: none. Secondary antibody: Atto 532 rabbit secondary antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 50 kDa, 25 kDa for Goat IgG. Other band(s): none.

References

- Sarmento et al. Exploiting the tunability of stimulated emission depletion microscopy for super-resolution imaging of nuclear structures. *Nature Communications* (2018)

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