Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor 594

Product Details	
Size	1 mg
Species Reactivity	Rabbit
Host/Isotope	Goat / IgG
Class	Polyclonal
Type	Secondary Antibody
Conjugate	Alexa Fluor® 594
Immunogen	Gamma Immunoglobins Heavy and Light chains
Form	liquid
Concentration	2 mg/mL
Purification	purified
Storage buffer	PBS, pH 7.5
Contains	5mM sodium azide
Storage Conditions	4° C, store in dark
RRID	AB_2534079

Applications	Tested	Dilution	Published
Immunohistochemistry (Frozen) (IHC (F))	-	1:200	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-		4 Publications
Immunocytochemistry (ICC)	✓	2 µg/mL	13 Publications
Western Blot (WB)	-		1 Publication
Immunohistochemistry (IHC)	-	1:200	4 Publications
Miscellaneous PubMed (Misc)	-		162 Publications
Flow Cytometry (Flow)	✓	1-10 µg/mL	
Immunofluorescence (IF)	✓	2 µg/mL	

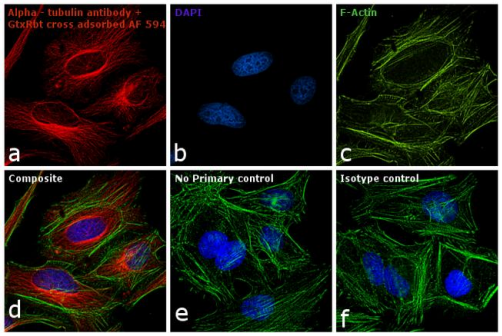
Product Specific Information

To minimize cross-reactivity, these goat anti-rabbit IgG whole antibodies have been cross-adsorbed against human IgG, human serum, mouse IgG, mouse serum, and bovine serum. Cross-adsorption or pre-adsorption is a purification step to increase specificity of the antibody resulting in higher sensitivity and less background staining. The secondary antibody solution is passed through a column matrix containing immobilized serum proteins from potentially cross-reactive species. Only the nonspecific-binding secondary antibodies are captured in the column, and the highly specific secondaries flow through. The benefits of this extra step are apparent in multiplexing/multicolor-staining experiments (e.g., flow cytometry) where there is potential cross-reactivity with other primary antibodies or in tissue/cell fluorescent staining experiments where there are may be the presence of endogenous immunoglobulins.

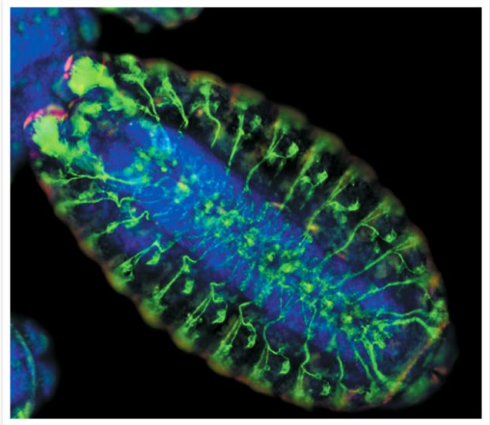
Alexa Fluor dyes are among the most trusted fluorescent dyes available today. Invitrogen™ Alexa Fluor 594 dye is a bright, red-fluorescent dye with excitation ideally suited to the 594 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 594 dye is pH-insensitive over a wide molar range. Probes with high fluorescence quantum yield and high photostability allow detection of low-abundance biological structures with great sensitivity. Alexa Fluor 594 dye molecules can be attached to proteins at high molar ratios without significant self-quenching, enabling brighter conjugates and more sensitive detection. The degree of labeling for each conjugate is typically 2-8 fluorophore molecules per IgG molecule; the exact degree of labeling is indicated on the certificate of analysis for each product lot.

Using conjugate solutions: Centrifuge the protein conjugate solution briefly in a microcentrifuge before use; add only the supernatant to the experiment. This step will help eliminate any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining. Because staining protocols vary with application, the appropriate dilution of antibody should be determined empirically. For the fluorophore-labeled antibodies a final concentration of 1-10 µg/mL should be satisfactory for most immunohistochemistry and flow cytometry applications.

Product Images For Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor 594



Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11012) in IF
Immunofluorescence analysis of Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor 594 (Product # A-11012) was performed using HeLa cells stained with alpha Tubulin Rabbit Polyclonal Antibody (Product # PA5-16891). The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, blocked with 1% BSA for 1 hour and labeled with 2 µg/mL of rabbit primary antibody for 3 hours at room temperature. Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor 594 (A-11012) was used at a concentration of 2 µg/mL in phosphate buffered saline containing 0.2 % BSA for 45 minutes at room temperature, for detection of alpha Tubulin in the cytoplasm (Panel a: red). Nuclei (Panel b: blue) were stained with DAPI in SlowFade® Gold Antifade Mountant (Product # S36938). F-actin was stained with Alexa Fluor® 488 Phalloidin (Product # A12379, 1:300) (Panel c: green). Panel d represents the composite image. No nonspecific staining was observed with the secondary antibody alone (panel f), or with an isotype control (panel e). The images were captured at 60X magnification.



Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11012) in IF
The peripheral nervous system of a wild-type (Canton-S) Drosophila melanogaster embryo labeled with the monoclonal 22c10 antibody (which detects a microtubule-associated protein) and subsequently visualized using green-fluorescent Alexa Fluor® 488 Rabbit Anti-Mouse IgG antibody (Product # A-11059). The actively dividing cells of the developing denticle bands were labeled with a rabbit anti-histone-H3 antibody and visualized using red-fluorescent Alexa Fluor® 594 Goat Anti-Rabbit IgG antibody (Product # A-11012). Finally, the nuclei, which are concentrated in the central nervous system, were counterstained with blue-fluorescent DAPI (Product # D1306, D3571, D21490). Image contributed by Neville Cobbe, University of Edinburgh.

186 References

Immunohistochemistry (Frozen) (2)

Stem cells international

Neural Differentiation in HDAC1-Depleted Cells Is Accompanied by Coilin Downregulation and the Accumulation of Cajal Bodies in Nucleoli.

"A11012 was used in immunohistochemistry - frozen section to assess Cajal body distribution patterns in cell nuclei during neurogenesis"

Authors: Krejí J,Legartová S,Bártová E

Species
Not Applicable

Dilution
1:200

Year
2019

eLife

A molecular mechanism for the topographic alignment of convergent neural maps.

"A11012 was used in immunohistochemistry - frozen section to investigate the mechanisms of neural map alignment for sensory processing"

Authors: Savier E,Eglen SJ,Bathélémy A,Perraut M,Pfrieger FW,Lemke G,Reber M

Species
Not Applicable

Dilution
1:500

Year
2017

Immunohistochemistry (Paraffin) (4)

Journal of orthopaedic research : official publication of the Orthopaedic Research Society

Diminished bone regeneration after debridement of posttraumatic osteomyelitis is accompanied by altered cytokine levels, elevated B cell activity, and increased osteoclast activity.

"A11012 was used in immunohistochemistry - paraffin section to infer a RANKL-dependent osteoclastogenesis after debridement of osteomyelitis coinciding with elevated B cells and simultaneously decreased osteogenesis"

Authors: Wagner JM,Jaurich H,Wallner C,Abraham S,Becerikli M,Dadras M,Harati K,Duhan V,Khairnar V,Lehnhardt M,Behr B

Species
Not Applicable

Dilution
Not Cited

Year
2017

Arteriosclerosis, thrombosis, and vascular biology

Telomerase Reverse Transcriptase Deficiency Prevents Neointima Formation Through Chromatin Silencing of E2F1 Target Genes.

"A11012 was used in immunohistochemistry - paraffin section to test if telomerase reverse transcriptase modulates proliferative vascular remodeling"

Authors: Endorf EB,Qing H,Aono J,Terami N,Doyon G,Hyzny E,Jones KL,Findeisen HM,Bruemmer D

Species
Not Applicable

Dilution
Not Cited

Year
2017

View more IHC (P) references on thermofisher.com

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ICC (13) WB (1) IHC (4) Misc (162)