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

Product Details	
Size	1 mg
Species Reactivity	Mouse
Published Species	Mouse
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_2534091

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1-10 µg/mL	1 Publication
Immunocytochemistry (ICC)	2 µg/mL	21 Publications
Immunofluorescence (IF)	2 µg/mL	2 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	5 Publications
Immunohistochemistry (IHC)	-	15 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Miscellaneous PubMed (Misc)	-	217 Publications

Product Specific Information

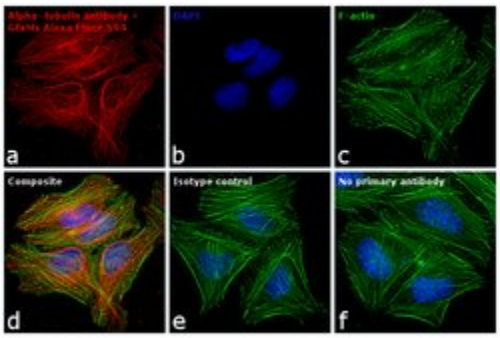
To minimize cross-reactivity, these goat anti-mouse IgG (H+L) whole secondary antibodies have been affinity purified and cross-adsorbed against bovine IgG, goat IgG, rabbit IgG, rat IgG, human IgG, and human serum. Cross-adsorption or pre-adsorption is a purification step to increase specificity of the 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-

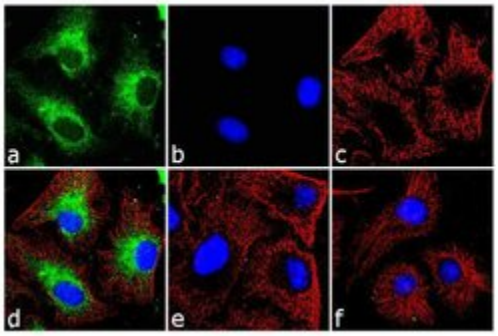
fluorescent dye with excitation ideally suited to the 594 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 594 dye is pH-insensitive over a wide molar range. Probes with high fluorescence quantum yield and high photostability allow detection of low-abundance biological 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.

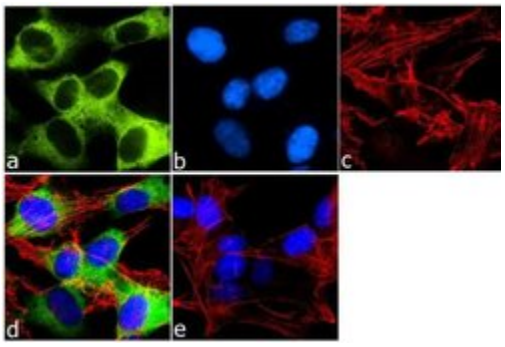
Product Images For Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor 594



Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody (A-11032) in IF
Immunofluorescence analysis of Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor® 594 conjugate was performed using HeLa cells stained with alpha Tubulin (236-10501) Mouse Monoclonal Antibody (Product # A11126). 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 primary antibody for 3 hours at room temperature. Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor® 594 (Product # A-11032) 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.



Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody (A-11032) in IF
Immunofluorescence was performed on methanol fixed HeLa cells for detection of BNIP3 using Anti-BNIP3 (8HCLC) Recombinant Rabbit Polyclonal Antibody (Product # 710728, 2 µg/mL), alpha-Tubulin Monoclonal Antibody (Product # 32-2500, 1 µg /mL) and labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034, 1:2000), Goat anti-Mouse IgG Secondary Antibody, Alexa Fluor® 594 conjugate (Product # A-11032, 1:400) respectively. Panel a) shows representative cells that were stained for detection and localization of BNIP3 protein (green), Panel b) is stained for nuclei (blue) using SlowFade® Gold Antifade Mountant with DAPI (Product # S36938,). Panel c) represents cytoskeletal alpha-tubulin staining (red). Panel d) is a composite image of Panels a, b and c clearly demonstrating cytoplasmic localization of BNIP3. Panel e) represents merged image of untreated cells with no signal Panel f) represents control cells with no primary Antibody to assess background.



Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody (A-11032) in IF
Immunofluorescence was performed on fixed and permeabilized SHSY-5Y cells for detection of Stathmin-2 using Anti-Stathmin-2 Rabbit Polyclonal Antibody (Product # 720178, 1 µg/mL), alpha-Tubulin was detected using Anti-alpha Tubulin Monoclonal Antibody (Product # 32-2500, 1 µg/mL) and labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034, 1:2000), Goat anti-Mouse IgG Secondary Antibody, Alexa Fluor®594 conjugate (Product # A-11032, 1:400) respectively. Panel a) shows representative cells that were stained for detection and localization of Stathmin-2 protein (green), Panel b) is stained for nuclei (blue) using SlowFade® Gold Antifade Mountant with DAPI (Product # S36938,). Panel c) represents cytoskeletal alpha-tubulin staining (red). Panel d) is a composite image of Panels a, b and c clearly demonstrating cytoplasmic localization of Stathmin-2. Panel e) represents control cells with no primary Antibody to assess background.

View more figures on thermofisher.com

262 References

Immunohistochemistry (Frozen) (5)

Stem cells international

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

"A11032 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
2020

Brain structure and function

Using a novel PV-Cre rat model to characterize pallidonigral cells and their terminations.

"A11032 was used in immunohistochemistry - frozen section to perform morphological and electrophysiological investigations of axons from parvalbumin-Cre rat neurons in globus pallidus"

Authors: Oh YM,Karube F,Takahashi S,Kobayashi K,Takada M,Uchigashima M,Watanabe M,Nishizawa K,Kobayashi K, Fujiyama F

Species
Not Applicable

Dilution
1:500

Year
2017

View more IHC (F) references on thermofisher.com

Immunocytochemistry (21)

Frontiers in medicine

Human-Induced Pluripotent Stem Cells Manufactured Using a Current Good Manufacturing Practice-Compliant Process Differentiate Into Clinically Relevant Cells From Three Germ Layers.

"A-11032 was used in Immunocytochemistry to show that our iPSC manufacturing process and cell culture system is not biased toward a specific lineage."

Authors: Shafa M,Yang F,Fellner T,Rao MS,Baghbaderani BA

Species
Mouse
Not Applicable

Dilution
1:1000
1:1000

Year
2020

Therapeutic advances in medical oncology

Proteomic analysis of gemcitabine-resistant pancreatic cancer cells reveals that microtubule-associated protein 2 upregulation associates with taxane treatment.

"A-11032 was used in Immunocytochemistry-immunoflourescence to evaluate the phospho(proteome) of gemcitabine-sensitive and gemcitabine-resistant pancreatic ductal adenocarcinoma cells."

Authors: Le Large TYS,El Hassouni B,Funel N,Kok B,Piersma SR,Pham TV,Olive KP,Kazemier G,van Laarhoven HWM, Jimenez CR,Bijlsma MF,Giovannetti E

Species
Mouse
Not Applicable

Dilution
1:200
1:200

Year
2020

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More applications with references on thermofisher.com

Misc (217) **IHC (15)** **IF (2)** **IHC (P) (1)** **Flow (1)**