Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor 546

Product Details	
Size	1 mg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Goat / IgG
Class	Polyclonal
Type	Secondary Antibody
Conjugate	Alexa Fluor® 546
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_2534089

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	10 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	2 Publications
Immunocytochemistry (ICC/IF)	4 µg/mL	18 Publications
Miscellaneous PubMed (Misc)	-	129 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.

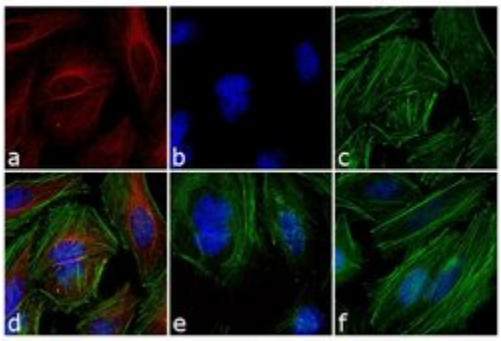
Alexa Fluor dyes are among the most trusted fluorescent dyes available today. Invitrogen™ Alexa Fluor 546 dye is a bright, orange-fluorescent dye with excitation ideally suited to the 546 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 546 dye is pH-insensitive 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 546 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 will be shipped at Room Temperature.

Product Images For Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor 546



Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody (A-11030) in ICC /IF

Immunofluorescence analysis of Goat anti-Mouse IgG (H+L) Secondary Antibody, Alexa Fluor 546 conjugate was performed using HeLa cells stained with alpha Tubulin (23610501) Mouse Monoclonal Primary 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 mouse primary antibody for 3 hours at room temperature. Goat anti-Mouse IgG (H+L) Secondary Antibody, Alexa Fluor 546 conjugate (Product # A-11030) was used at a concentration of 4 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.

161 References

Western Blot (1)

The Journal of biological chemistry

Carboxyl-terminal Tail-mediated Homodimerizations of Sphingomyelin Synthases Are Responsible for Efficient Export from the Endoplasmic Reticulum.

"A11030 was used in western blot to demonstrate the existence and functions of quaternary structures of SMS1 and SMS2"

Authors: Hayashi Y,Nemoto-Sasaki Y,Matsumoto N,Tanikawa T,Oka S,Tanaka Y,Arai S,Wada I,Sugiura T,Yamashita A

Species
Not Applicable

Dilution
Not Cited

Year
2017

Immunohistochemistry (10)

Scientific reports

Serotonergic Modulation Differentially Targets Distinct Network Elements within the Antennal Lobe of Drosophila melanogaster.

"A11030 was used in immunohistochemistry to investigate the number and functional identities of serotonin receptor-expressing neurons in the antennal lobe of Drosophila melanogaster"

Authors: Sizemore TR,Dacks AM

Species
Not Applicable

Dilution
Not Cited

Year
2016

Nature communications

Arkadia/RNF111 is a SUMO-targeted ubiquitin ligase with preference for substrates marked with SUMO1-capped SUMO2/3 chain.

"A-11030 was used in Immunohistochemistry to investigate if Arkadia specifically selects substrates carrying SUMO1-capped SUMO2/3 hybrid conjugates and if it targets them for proteasomal degradation."

Authors: Sriramachandran AM,Meyer-Teschendorf K,Pabst S,Ulrich HD,Gehring NH,Hofmann K,Praefcke GJK, Dohmen RJ

Species
Mouse
Not Applicable

Dilution
1:1000
1:1000

Year
2019

View more IHC references on thermofisher.com

Immunohistochemistry (Paraffin) (1)

Journal of gastroenterology and hepatology

Association of decreased expression of the macrophage scavenger receptor MARCO with tumor progression and poor prognosis in human hepatocellular carcinoma.

"A11030 was used in immunohistochemistry - paraffin section to study the impact of MARCO expression in liver cancer"

Authors: Sun H,Song J,Weng C,Xu J,Huang M,Huang Q,Sun R,Xiao W,Sun C

Species
Not Applicable

Dilution
Not Cited

Year
2017

More applications with references on thermofisher.com

IHC (F) (2) **ICC/IF (18)** **Misc (129)**