Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 488

Product Details	
Size	1 mg
Species Reactivity	Rabbit
Host/Isotype	Goat / IgG
Class	Polyclonal
Type	Secondary Antibody
Conjugate	Alexa Fluor™ 488
Excitation/Emission Max	499/520 nm
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_143165

Applications	Tested Dilution	Publications
Western Blot (WB)	-	0 Publication
Immunohistochemistry (IHC)	-	0 Publication
Immunohistochemistry (Paraffin) (IHC (P))	Assay-dependent	0 Publication
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	0 Publication
Immunohistochemistry (Frozen) (IHC (F))	Assay-dependent	0 Publication
Immunohistochemistry - Free Floating (IHC (Free))	-	0 Publication
Immunocytochemistry (ICC/IF)	4 µg/mL	0 Publication
Flow Cytometry (Flow)	1-10 µg/mL	0 Publication
Immunoprecipitation (IP)	-	0 Publication
ChIP assay (ChIP)	-	0 Publication
Miscellaneous PubMed (Misc)	-	0 Publication

Product Specific Information

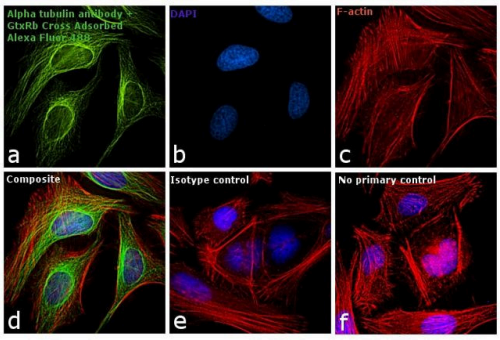
Alexa Fluor dyes are among the most trusted fluorescent dyes available today. Invitrogen™ Alexa Fluor™ 488 dye is a bright, green-fluorescent dye with excitation ideally suited to the 488 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 488 dye is pH-insensitive 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 488 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.

The goat anti-rabbit IgG whole antibody conjugates are most commonly prepared by immunizing the host animal with a pooled population of immunoglobulins from the target species and can be further purified and modified (e.g., immunoaffinity chromatography, antibody fragmentation, label conjugation, etc.) to generate highly specific reagents. In the first round of purification, whole immunoglobulins binding to the immunizing antibody are recovered and mainly consist of the ~150-kDa IgG class. Further purification with Protein A or G removes all immunoglobulin classes except IgG such that the affinity-purified antibodies react with IgG heavy chains and all classes of immunoglobulin light chains from rabbit. To minimize cross-reactivity, these goat anti-rabbit 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 where there is potential cross-reactivity with other primary antibodies or in immunohistochemistry experiments where there are may be the presence of endogenous immunoglobulins. For a highly cross-adsorbed secondary antibody equivalent (or equivalent secondary antibody preparation), please see product catalog number: A11034.

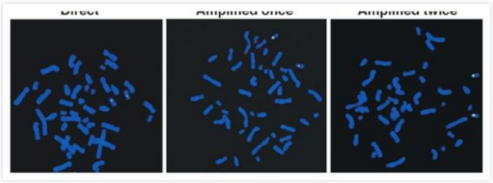
Using conjugate solutions: Centrifuge the protein conjugate solution briefly in a microcentrifuge before use; add only the supernatant to the experiment. This step will eliminate any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining. Because staining 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.

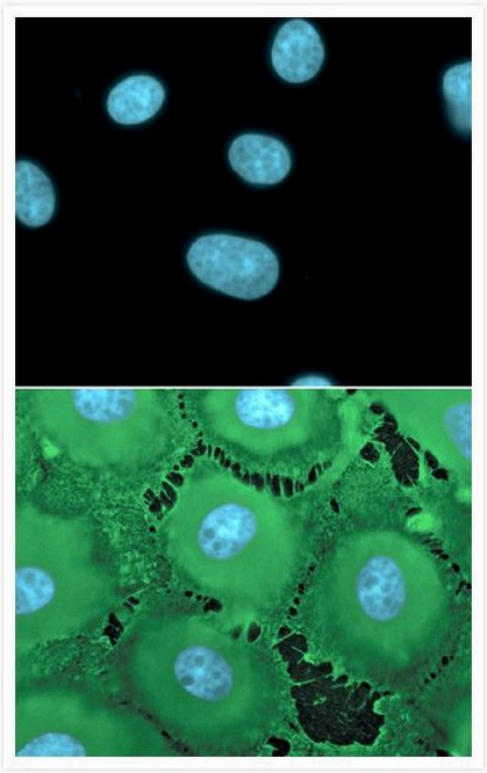
Product Images For Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 488



Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11008) in ICC/IF
Immunofluorescence analysis of Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody Alexa Fluor® 488 conjugate 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 Rabbit primary antibody for 3 hours at room temperature. Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody Alexa Fluor® 488 conjugate (Product # A-11008) 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: green). Nuclei (Panel b: blue) were stained with DAPI in SlowFade® Gold Antifade Mountant (Product # S36938). F-actin was stained with Rhodamine Phalloidin (Product # R415, 1:300) (Panel c: red). 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-11008) in ICC/IF
Chromosome spreads were prepared from the cultured fibroblast cell line MRC-5 and hybridized with an a-satellite probe labeled with the Oregon Green® 488 dye and specific for chromosome 17. The probe was labeled using the ULYSIS Alexa Fluor® 488 Nucleic Acid Labeling Kit (Product # U21659) (left panel). The signal was amplified using the Alexa Fluor® 488 conjugate of rabbit anti-fluorescein /Oregon Green® antibody (Product # A-11090; also available in Product # A11053) (middle panel) and amplified once again using Alexa Fluor® 488 goat anti-rabbit IgG antibody (Product # A-11008; also available in Product # A11053) (right panel). Note the significant signal enhancement with each amplification step.



Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11008) in ICC/IF
Nitrated tyrosine residues in bovine pulmonary artery endothelial cells detected with rabbit anti-nitrotyrosine antibody. Fixed and permeabilized bovine pulmonary artery endothelial cells were treated with either degraded peroxynitrite (top panel) or 100 µM peroxynitrite (bottom panel) for five minutes at room temperature to induce protein nitration. Nitrated tyrosine residues were detected with our rabbit anti-nitrotyrosine polyclonal antibody (Product # A-21285) and visualized with the green-fluorescent Alexa Fluor® 488 goat anti-rabbit IgG antibody (Product # A-11008). Nuclei were counterstained with blue-fluorescent DAPI (Product # D1306, D3571, D21490).

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Ce6-GFFY is a novel photosensitizer for colorectal cancer therapy. Genes Dis (2025)

Hyperbaric oxygen potentiates platelet-rich plasma composition and accelerates bone healing. J Orthop Translat (2025)

Hippocampal gene expression changes associated with sequential behavioral training in a temporal lobe epilepsy rat model. Epilepsy Behav Rep (2025)

Calycosin7ODglucoside downregulates mitophagy by mitigating mitochondrial fission to protect HT22 cells from oxygenglucose deprivation/reperfusioninduced injury. Mol Med Rep (2025)

Aquaporin1 regulates microglial polarization and inflammatory response in traumatic brain injury. Int J Mol Med (2025)