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

Product Details	
Size	1 mg
Species Reactivity	Mouse
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_2534069

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

Product Specific Information

To minimize cross-reactivity, these goat anti-mouse IgG whole antibodies have been cross-adsorbed against 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. For a highly cross-adsorbed secondary antibody equivalent, please see product Cat. No. A11029.

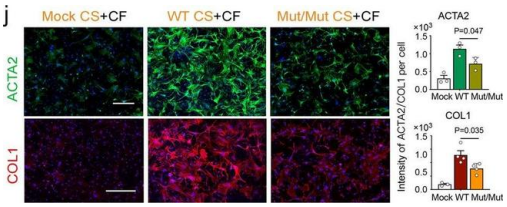
Alexa Fluor dyes are among the most trusted fluorescent dyes available today. Invitrogen™ Alexa Fluor 488 dye is a bright, green-fluorescent dye with excitation ideally suited to the 488 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 488 dye is pH-insensitive over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

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.

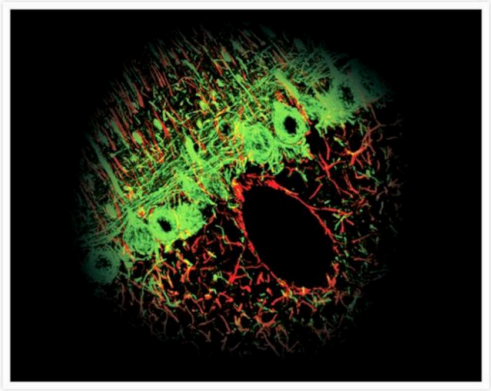
Product will be shipped at Room Temperature.

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

Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11001) in ICC/IF
Microtubules of bovine pulmonary artery endothelial cells tagged with mouse monoclonal anti-a-tubulin antibody (Product # A11126) and subsequently probed with: Alexa Fluor® 488 Goat Anti-Mouse IgG antibody (Product # A-11001, top panel), Alexa Fluor® 546 Goat Anti-Mouse IgG antibody (Product # A-11003, middle panel) or Alexa Fluor® 594 Goat Anti-Mouse IgG antibody (Product # A-11005, bottom panel). These images were acquired using a FITC bandpass optical filter set, a rhodamine bandpass optical filter set, and a Texas Red bandpass optical filter set, respectively.



Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11001) in ICC/IF
WWP2 regulates macrophage activation and profibrotic function.a Scatter plot of log2fold changes (FC) in mRNA expression from scRNA-seq in cardiac macrophages between Ang-II-treated Mut/Mut and WT mice (y axis) and log2FC between WT Ang-II-treated and WT untreated mice (x axis). Differentially expressed genes (DEGs) in red (n = 237, FDR < 0.05). Ang-II treatment: 500 ng/kg/min, 7 days. b Top downregulated pathways in Mut/Mut macrophages identified by gene set enrichment analysis (GSEA) of DEGs. NES, normalized enrichment score. c Violin plots illustrate the expression score of the GSEA-derived pathways across all cardiac macrophage clusters in Mut/Mut and WT mice after treatment with Ang-II (7 days). d qRT-PCR analysis of selected pro-inflammatory and homeostatic/reparatory genes in macrophages sorted from LV of WT and Mut/Mut mice treated with saline or Ang-II (7 days). n = 5-12 for each group. e Representative immunofluorescence staining of smooth muscle aortic alpha-actin (ACTA2, green) in (myo)fibroblasts co-cultured with CD45 + macrophages (red). Scale bar, 100 µm. f Number of cardiac macrophages moving across the proximity border (left), and ACTA2 expression in (myo)fibroblasts (right). n = 3 per experimental group and 15-25 fibroblast images were taken from each slide. g Schematic of the co-culture experimental setup in vitro. The conditioned supernatant (CS) from BMDMs treated with LPS (100 ng/ml, 4 hrs) and I… Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/36450710), licensed under a CC BY license.



Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11001) in ICC/IF
Filamentous structures of neuronal cells in a rat cerebellum were fluorescently labeled to differentiate the cell types. The cerebellum section was probed with primary antibodies to neurofilament and glial fibrillary acidic proteins (GFAP) and subsequently visualized with the green-fluorescent Alexa Fluor® 488 Goat Anti-Mouse IgG (Product # A-11001) and red-orange-fluorescent Alexa Fluor® 568 Goat Anti-Rabbit IgG (Product # A-11011) antibodies. This confocal micrograph was contributed by Gillian Davidson, Andrew Hubbard and Chris Guerin, Neurotoxicology Group, M.R.C Toxicology Unit, University of Leicester, Leicester, U.K.

View more figures on fishersci.com

7785 References

Genetic and pharmacological reduction of CDK14 mitigates synucleinopathy. Cell Death Dis (2024)

The RNA-binding protein Cpeb4 regulates splicing of the Id2 gene in osteoclast differentiation. J Cell Physiol (2024)

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Deficits in basal and evoked striatal dopamine release following alpha-synuclein preformed fibril injection: An in vivo microdialysis study. Eur J Neurosci (2024)

A safety screening platform for individualized cardiotoxicity assessment. iScience (2024)