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))	-	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

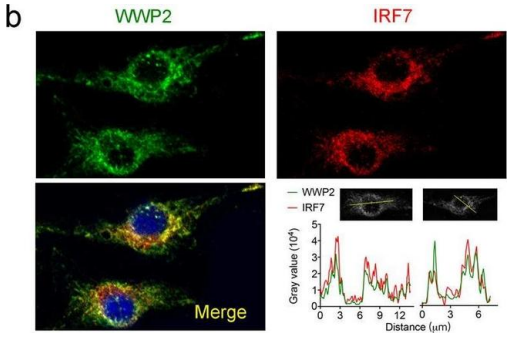
Alexa Fluor dyes are among the most trusted fluorescent dyes available today. Invitrogen™ Alexa Fluor™ 488 dye is a bright, green-fluorescent dye with excitation ideally suited to the 488 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 488 dye is pH-insensitive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

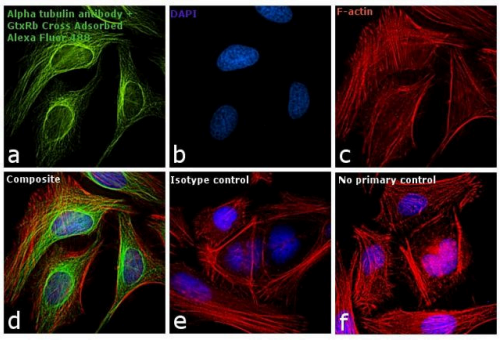
Using conjugate solutions: Centrifuge the protein conjugate solution briefly in a microcentrifuge before use; add only the supernatant to the experiment. This step will eliminate any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining. Because staining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

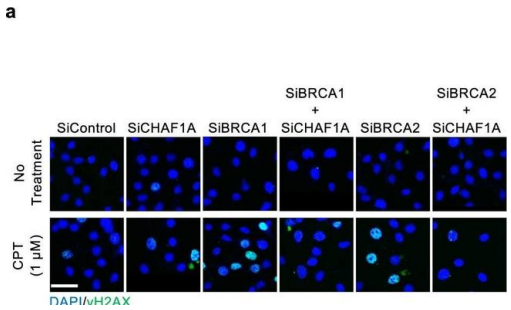
Product Images For Goat anti-Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 488



Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody (A-11008) in ICC/IF
WWP2 regulates IRF7 transcriptional activity in macrophages through non-degradative ubiquitination.a Representative WB of co-immunoprecipitation experiment with WWP2 (upper) or IRF7 (lower) showing a direct interaction of WWP2 with IRF7 in BMDMs following LPS stimulation. WCL, whole cell lysate. b Expression of WWP2 (green) and IRF7 (red) in BMDMs following LPS stimulation. The intensity profiles of WWP2 and IRF7 were plotted along an ideal straight line (yellow) crossing the nuclei of two representative cells, showing the WWP2 and IRF7 signals overlap (bottom right). c In-cell ubiquitylation analysis of IRF7 in BMDMs from control WT and WWP2/ mice. Cells were treated with MG132 (10uM, 3 hrs) followed by LPS stimulation. d Representative WB measuring p-IRF7 protein expression in WT and WWP2/ BMDMs with or without LPS stimulation. Quantification of p-IRF7 protein expression is shown in the bar plot below. e Quantification of the IRF7 Interferon-stimulated response element (ISRE) luciferase activity in WT and WWP2/ BMDMs following LPS treatment. n = 7-11 for each group. f Representative immunoblots of native Polyacrylamide gel electrophoresis (PAGE) identifying monomeric and dimeric forms of IRF7 (indicated by arrows) in WT and WWP2/ BMDMs with or without LPS stimulation. g Representative cellular images (BMDMs) of in-cell IRF7 and p-IRF7 from 10,000 acquired events by i… Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/36450710), licensed under a CC BY license.



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
Loss of CAF-1 suppresses genomic instability in BRCA-deficient cells.a, b H2AX immunofluorescence experiment showing that CHAF1A depletion suppresses CPT-induced DNA damage accumulation in BRCA1 or BRCA2-depleted cells. HeLa cells were treated with 1 µM CPT for 1 h followed by media removal and chase in fresh media for 3 h. Representative micrographs (scale bar represents 50 µm) (a) and quantifications (b) are shown. At least 50 cells were quantified for each condition. The mean values are represented on the graph, and the p-values (t-test, two-tailed, unpaired) are listed at the top. Western blots confirming the co-depletions are shown in Supplementary Fig. 2a. c-e Neutral comet assay showing that CHAF1A depletion suppresses CPT-induced (c, d) and cisplatin-induced (e) DSB formation in BRCA1 or BRCA2-depleted cells. HeLa cells were treated with 100 nM CPT for 4 h or 2.5 µM cisplatin for 24 h. Representative micrographs (c) and quantifications (d, e) are shown. At least 60 nuclei were quantified for each condition. The mean values are represented on the graph, and the p-values (t-test, two-tailed, unpaired) are listed at the top. f, g Clonogenic survival experiments showing that CHAF1A co-depletion in BRCA2-knockdown (f) or BRCA1-knockdown (g) HeLa cells promotes cisplatin resistance. The average of three experiments, with standard deviations indicated as error bars, is shown. Asterisks indicate sta… Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/36085347), licensed under a CC BY license.

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ER-stress response in retinal Müller glia occurs significantly earlier than amyloid pathology in the Alzheimer's mouse brain and retina. Glia (2024)

Oat -glucan repairs the epidermal barrier by upregulating the levels of epidermal differentiation, cell-cell junctions and lipids via Dectin-1. Br J Pharmacol (2024)

Sigma-1 Receptor Inhibition Reduces Mechanical Allodynia and Modulate Neuroinflammation in Chronic Neuropathic Pain. Mol Neurobiol (2024)

Intravenous recombinant cerebellin 1 treatment restores signalling by spinal glutamate delta 1 receptors and mitigates chronic pain. Br J Pharmacol (2024)

Spatial and Temporal Localization of Connexins in Cells Using Confocal Microscopy. Methods Mol Biol (2024)

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