Goat anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 680

Product Details	
Size	1 mg
Species Reactivity	Rat
Host/Isotype	Goat / IgG
Class	Polyclonal
Type	Secondary Antibody
Conjugate	Alexa Fluor™ 680
Excitation/Emission Max	681/704 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_2535750

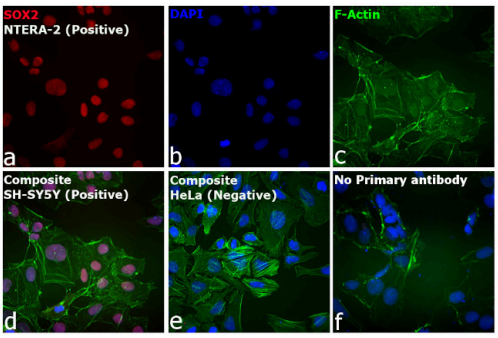
Applications	Tested Dilution	Publications
Western Blot (WB)	1:5,000-1:50,000	0 Publication
Immunocytochemistry (ICC/IF)	1:200-1:2,000	-
Flow Cytometry (Flow)	-	0 Publication
Miscellaneous PubMed (Misc)	-	0 Publication

Product Specific Information

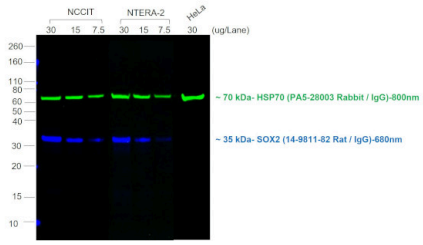
This secondary antibody is designed for fluorescent Western blot detection on various near-infrared fluorescence instruments. This antibody can be used for multi-color and multiplexing detection when using other antibodies conjugated to compatible Alexa Fluor™ dyes and wavelengths. Other applications of this antibody include immunofluorescent and fluorescent imaging applications when using instrumentation with appropriate excitation and detection capabilities.

Product will be shipped at Room Temperature.

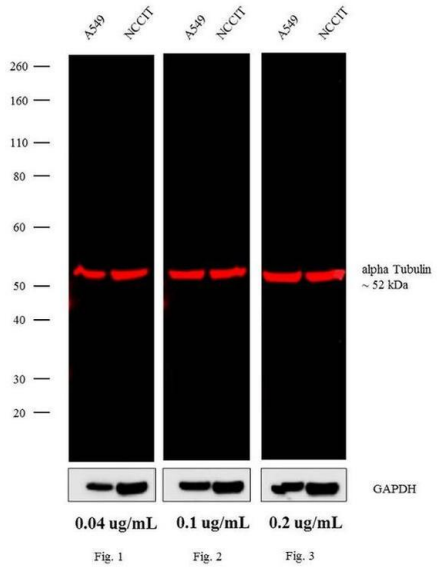
Product Images For Goat anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 680



Rat IgG (H+L) Cross-Adsorbed Secondary Antibody (A-21096) in ICC/IF
Immunofluorescence analysis of Goat anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 680 (Product # A-21096) was performed using NTERA-2 (positive model) and Hela (negative model) in cells stained with SOX2 Monoclonal Antibody (Btjce), eBioscience (Product # 14-9811-82). The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, blocked with 2% BSA for 1 hour and labeled with 1:100 dilution of primary antibody overnight at 4C. Goat anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 680 (Product # A-21096, 1: 2000 dilution) in 0.1% BSA in PBS for 1 hour at room temperature, was used for detection of SOX2 in the nucleus (Panel a: Red). Nuclei (Panel b: blue) were stained with Hoechst33342 (Product # H1399). F-actin was stained with Alexa Fluor® 488 Phalloidin (Product # A12379, 1:500) (Panel c: green). Panel d represents the composite image. The specificity of the secondary antibody was proved by the absence of signal in HeLa (negative model for SOX2) due to no primary antibody binding (Panel e). Non-specific staining was not observed with secondary antibody alone (panel f). The images were captured at 40X magnification in CellInsight CX7 LZR High-Content Screening (HCS) Platform (Product # CX7A1110LZR) and externally deconvoluted (D.Sage et al./Methods 115 (2017) 28–41).



Rat IgG (H+L) Cross-Adsorbed Secondary Antibody (A-21096) in WB
Multiplexed fluorescent western blot was performed using Goat anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 680 (Product # A-21096). Whole cell extracts (1% SDS) of NCCIT (Lane 1, 2, 3), NTERA-2 (Lane 4, 5, 6) and HeLa (Lane 7) were electrophoresed usingNuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were transferred onto anitrocellulose membrane (Product # IB23001) byiBlot® 2 Dry BlottingSystem (Product # IB21001). The blot was probed with SOX2 Monoclonal Antibody (Btjce), eBioscience™ (Product # 14-9811-82), and HSP70 Polyclonal Antibody (Product # PA5-28003). Secondary antibodies (Product # A-21096, 1: 20,000 dilution), and (Product # A32808, 1:20,000 dilution) were used for detection of SOX2 and HSP70 respectively. Fluorescent detection was performed usingiBright™ FL1500 (Product # A44115). The anti-rat secondary antibody (Product # A-21096) specifically detects the rat primary antibody.



Rat IgG (H+L) Cross-Adsorbed Secondary Antibody (A-21096) in WB
Western blot analysis was performed on whole cell extracts (30 µg lysate) of A549 (Lane 1) and NCCIT (Lane 2). The blots were probed with Anti-alpha Tubulin Rat Monoclonal Antibody (Product # MA1-80017, 1 µg/mL) and detected using Goat anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor 680 (Product # A-21096) at dilutions 0.04 µg/mL (Fig. 1), 0.1 µg/mL (Fig. 2) and 0.2 µg/mL (Fig. 3). A 52 kDa band corresponding to alpha Tubulin was observed across the cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary antibody after blocking with 5 % skimmed milk. Fluorescent detection was performed using the Odyssey® Fc imaging system (Li-cor Biosciences).

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75 References

Lipofuscin autofluorescence confounds intracellular amyloid detection in the aged mouse brain. Aging Brain (2025)

Genetically induced mouse model for colon-specific epithelial cell tumorigenesis driven by loss of K8 and Apc bioRxiv (2025)

Multiple mutations in polyketide synthase led to disruption of Psittacofulvin production across diverse parrot species. Commun Biol (2025)

Neutrophil extracellular traps and citrullinated fibrinogen contribute to injury in a porcine model of limb ischemia and reperfusion. Front Immunol (2024)

E3 ligases RNF43 and ZNRF3 display differential specificity for endocytosis of Frizzled receptors. Life Sci Alliance (2024)