Chicken anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 647

Product Details	
Size	1 mg
Species Reactivity	Rat
Host/Isotype	Chicken / IgY
Class	Polyclonal
Type	Secondary Antibody
Conjugate	Alexa Fluor™ 647
Excitation/Emission Max	650/671 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_2535875

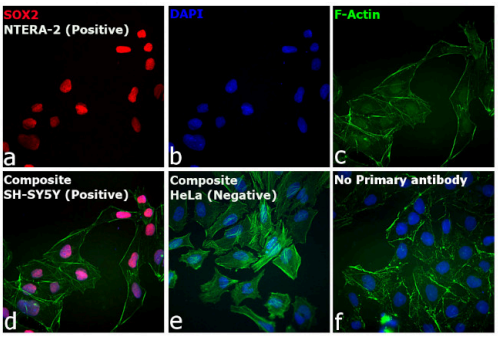
Applications	Tested Dilution	Publications
Western Blot (WB)	1:5,000-1:10,000	-
Immunohistochemistry (IHC)	-	0 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1-10 µg/mL	0 Publication
Immunocytochemistry (ICC/IF)	1:1,000-1:2,000	0 Publication
Miscellaneous PubMed (Misc)	-	0 Publication

Product Specific Information

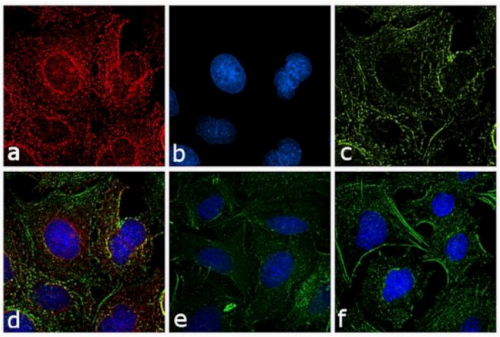
Chicken anti-rat antibodies react with IgG heavy chains and all classes of immunoglobulin light chains from rat. Chicken secondary antibodies have gained popularity because they demonstrate a lower level of nonspecific binding. Chicken antibodies lack a classic “Fc” domain and will not bind to protein A or protein G, nor will they bind to mammalian IgG Fc receptors. Fluorescence of this long-wavelength Alexa Fluor dye is not visible by looking through a conventional fluorescence microscope.

Product will be shipped at Room Temperature.

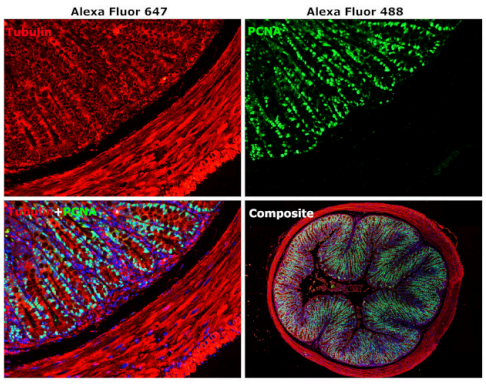
Product Images For Chicken anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 647



Rat IgG (H+L) Cross-Adsorbed Secondary Antibody (A-21472) in ICC/IF
Immunofluorescence analysis of Chicken anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 647 (Product # A-21472) 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. Chicken anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 647 (Product # A-21472, 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-21472) in ICC/IF
Immunofluorescence analysis of Chicken anti-Rat IgG (H+L) Secondary Antibody, Alexa Fluor® 647 was performed using A549 cells stained with alpha Tubulin (YL1/2) Rat Monoclonal Antibody (Product # MA1-80017). 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 2µg/mL Rat primary antibody for 3 hours at room temperature. Chicken anti-Rat IgG (H+L) Secondary Antibody, Alexa Fluor® 647 (Product # A-21472) was used at a concentration of 2µg/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.



Rat IgG (H+L) Cross-Adsorbed Secondary Antibody (A-21472) in IHC (P)
Immunohistochemical analysis was performed on formalin-fixed paraffin-embedded mouse duodenum tissue section co-stained with Tubulin Rat Monoclonal Antibody (Product # MA1-80017) at 10 µg/mL in 0.1% normal goat serum overnight at 4 degree Celsius detected with Chicken anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 647 (Product # A-21472) and PCNA Recombinant Rabbit Monoclonal Antibody (Product # MA5-32051) at 10 µg/mL in 0.1% normal goat serum overnight at 4 degree Celsius detected with Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor™ Plus 488 (Product # A32790TR). Heat-induced epitope retrieval was performed on de-paraffinized sections using eBioscience™ IHC Antigen Retrieval Solution - Low pH (10X) (Product # 00-4955-58) in a decloaking chamber at 110 degrees Celsius for 15 minutes, followed by blocking with 2% normal goat serum, and then probing with primary and secondary antibodies. ReadyProbes™ Tissue Autofluorescence Quenching Kit (Product # R37630) was used to quench autofluorescence from the tissues. Nuclei were stained with DAPI (Product # D1306) and the sections were mounted using ProLong™ Glass Antifade Mountant (Product # P36984). The images were captured on EVOS™ M7000 Imaging System (Product # AMF7000) at 20X magnification and externally deconvoluted.

View more figures on thermofisher.cn

120 References

Analysis of cellular NO-GC expression in the murine heart and lineage determination in angiotensin II-induced fibrosis. iScience (2025)

Cyclin E1/CDK2 activation defines a key vulnerability to WEE1 kinase inhibition in gynecological cancers. NPJ Precis Oncol (2025)

Rejuvenating aged osteoprogenitors for bone repair. Elife (2024)

GRIM-19-mediated induction of mitochondrial STAT3 alleviates systemic sclerosis by inhibiting fibrosis and Th2/Th17 cells. Exp Mol Med (2024)

Rejuvenating aged osteoprogenitors for bone repair bioRxiv (2024)