# Goat anti-Syrian Hamster IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 647

| Product Details | |
|---|---|
| Size | 500 µg |
| Species Reactivity | Hamster |
| Host/Isotype | Goat / IgG |
| 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, DO NOT FREEZE! |
| RRID | AB_2925785 |

| Applications | Tested Dilution | Publications |
|---|---|---|
| Western Blot (WB) | 2 µg/mL | - |
| Immunohistochemistry (IHC) | Assay-dependent | - |
| Immunocytochemistry (ICC/IF) | 1-4 µg/mL | - |
| Flow Cytometry (Flow) | 1-4 µg/mL | - |

### Product Specific Information

This antibody specifically detects Syrian hamster IgG and shows negligible reactivity to Armenian hamster IgG as tested by ELISA and immunofluorescence.

This goat anti-syrian hamster IgG (H+L) whole secondary antibody has been affinity-purified and shows minimum cross-reactivity to bovine, horse, human, mouse, rabbit, rat serum proteins. This antibody specifically detects Syrian hamster IgG and shows negligible reactivity to Armenian hamster IgG. 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 secondary antibodies 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 may be the presence of endogenous immunoglobulins.

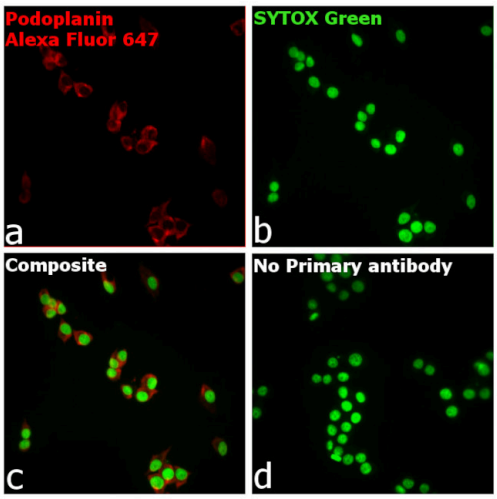
Alexa Fluor dyes are among the most trusted fluorescent dyes available today. Invitrogen™ Alexa Fluor 647 dye is a near-infrared-fluorescent dye with excitation ideally suited to the 647 nm laser line. For stable signal generation in imaging and flow cytometry, Alexa Fluor 647 dye is pH-insensitive over 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 647 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.

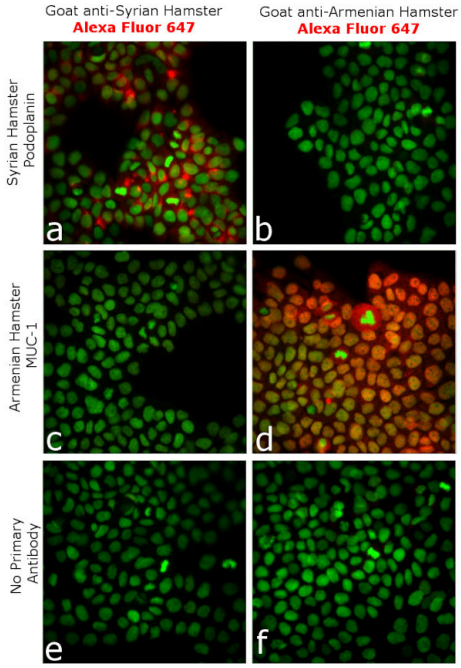
Product will be shipped at Room Temperature.

## Product Images For Goat anti-Syrian Hamster IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 647



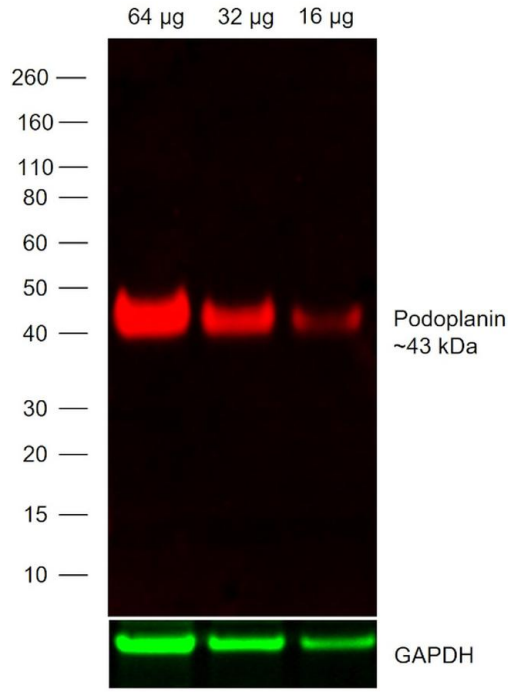

**Syrian Hamster IgG (H+L) Highly Cross-Adsorbed Secondary Antibody (A78962) in ICC/IF**

Immunofluorescence analysis of Goat anti-Syrian Hamster IgG (H+L) Highly Cross Adsorbed Secondary Antibody, Alexa Fluor™ 647 (Product # A78962, 1: 1,000 dilution) was performed on fixed RAW 264.7 cells stained with Syrian Hamster Podoplanin Monoclonal Antibody (Product # 14-5381-85, 1:100 dilution). Panel a) shows representative cells that were stained for detection and localization of Podoplanin protein, Panel b) is stained for nuclei using SYTOX™ Green Nucleic Acid Stain (Product # S7020, 1:10,000 dilution). Panel c) is a composite image of Panels a and b clearly demonstrating specific detection of Podoplanin Monoclonal Antibody in the cytoplasm by Goat anti-Syrian Hamster IgG (H+L) Highly Cross Adsorbed Secondary Antibody, Alexa Fluor™ 647. Panel d) represents control cells with no primary antibody to assess the background. The images were captured at 40X magnification using CX7 LZR HCS imaging platform.




**Syrian Hamster IgG (H+L) Highly Cross-Adsorbed Secondary Antibody (A78962)**

Secondary antibody specificity was demonstrated by testing for cross-reactivity in immunofluorescence. The figure shows that Goat anti-Syrian Hamster IgG (H+L) Highly Cross Adsorbed Secondary Antibody, Alexa Fluor™ 647 (Product # A78962) specifically detects the Syrian hamster primary antibody (panel a) with no cross-reactivity to the Armenian hamster primary antibody (panel c). Panels e) and f) represent cells with no primary antibody to assess the background. The images were captured at 40X magnification using CX7 LZR HCS imaging platform. {RE}




**Syrian Hamster IgG (H+L) Highly Cross-Adsorbed Secondary Antibody (A78962) in WB**

Western blot analysis of Goat anti-Syrian Hamster IgG (H+L) Highly Cross Adsorbed Secondary Antibody, Alexa Fluor™ 647 (Product # A78962) was performed by loading tissue extracts of Mouse Lung at two-fold dilutions from 64µg (Lane 1) to 16µg (Lane 3) which were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with Podoplanin Monoclonal Antibody (eBio8.1.1 (8.1.1)) (Product # 14-5381-82, 1:100 dilution) and detected by fluorescent imaging with Goat anti-Syrian Hamster IgG (H+L) Highly Cross Adsorbed Secondary Antibody, Alexa Fluor™ 647 (Product # A78962, 1:1,000 dilution) using the iBright FL 1500 (Product # A44115). GAPDH (Product #MA5-15738; 1:1,000) and its appropriate secondary antibody conjugated to Alexa Fluor™ 488 was used as a loading control.

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