

Datasheet for 620-145-440

## Golden Syrian & Armenian Hamster IgG (H&L) Antibody DyLight™ 800 Conjugated Pre-Adsorbed

### Overview

<b>Description:</b>	Goat Anti-Golden Syrian & Armenian Hamster IgG (H&L) Antibody DyLight™ 800 Conjugated (Min X MOUSE and RAT Serum Proteins) - 620-145-440
<b>Item No.:</b>	620-145-440
<b>Size:</b>	100 µg
<b>Applications:</b>	WB, Other
<b>Reactivity:</b>	Armenian Hamster, Golden Syrian Hamster
<b>Host Species:</b>	Goat

### Product Details

<b>Background:</b>	Anti-Golden Syrian & Armenian Hamster IgG DyLight Antibody generated in goat detects Golden Syrian & Armenian Hamster IgG. Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the complement cascade, and opsonization for phagocytosis. The whole IgG molecule possesses both the F(c) region, recognized by high-affinity Fc receptor proteins, as well as the F(ab) region possessing the epitope-recognition site. Both heavy and light chains of the antibody molecule are present. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition.
<b>Synonyms:</b>	goat anti-Golden Syrian & Armenian Hamster IgG DyLight™800 conjugated antibody, goat anti-Hamster IgG DyLight™ 800 conjugated antibody
<b>Host Species:</b>	Goat
<b>Specificity:</b>	IgG (H&L)
<b>Conjugate:</b>	DyLight™ 800
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

**F/P Ratio:** 1.9

## Target Details

<b>Reactivity:</b>	Armenian Hamster, Golden Syrian Hamster
<b>Immunogen:</b>	Armenian and Golden Syrian Hamster IgG, whole molecule
<b>Purity/Specificity:</b>	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Golden Syrian & Armenian Hamster IgG coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Golden Syrian & Armenian Hamster and Golden Syrian & Armenian Hamster Serum. No reaction was observed against Mouse or Rat Serum Proteins. This antibody will react with heavy chains of Golden Syrian & Armenian Hamster IgG and with light chains of most Golden Syrian & Armenian Hamster immunoglobulins.

## Application Details

<b>Tested Applications:</b>	WB
<b>Suggested Applications:</b>	Other (Based on references)
<b>Application Note:</b>	Anti-Golden Syrian & Armenian Hamster IgG DyLight Antibody has been tested by western blot and is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>FLISA:</b>	>1:20,000
<b>IF:</b>	>1:5,000
<b>WB:</b>	1:10,000-1:25,000

## Formulation

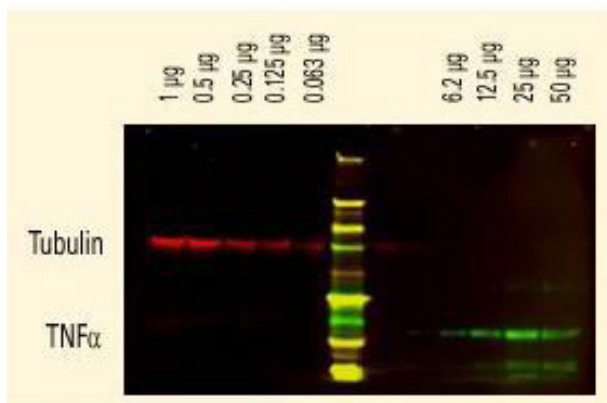
<b>Physical State:</b>	Lyophilized
<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide

<b>Stabilizer:</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
<b>Reconstitution Volume:</b>	100 $\mu$ L
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

## Shipping & Handling

<b>Shipping Condition:</b>	Ambient
<b>Storage Condition:</b>	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images









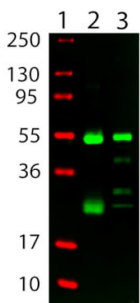
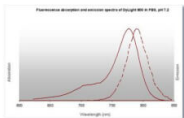
### Western Blot

DyLight™ dyes can be used for two-color western blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNF $\alpha$  was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

**Diagram**

Properties of DyLight™ Conjugates.

Emission	Color	DyLight™ Dye	Ex/Em (nm)	$\epsilon$ (M <sup>-1</sup> cm <sup>-1</sup> )	Similar Dyes
Blue		405	400/420	30,000	Alexa™ 405, Cascade Blue
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®, TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	140,000	Alexa™ 680, Cy5.5®, IRDye™ 700
Infrared		800	770/794	270,000	IRDye™ 800

**Diagram**

**Western Blot**

Western Blot showing detection of Golden Syrian Hamster IgG (Lane 2) and Armenian Hamster IgG (Lane 3) was run on a 4-20% gel and transferred to 0.45  $\mu$ m nitrocellulose. After blocking with 5% Blotto (p/n B501-0500) 30 min at 20°C, Anti-Golden Syrian & Armenian Hamster IgG (H&L) (GOAT) Antibody DyLight™ 800 Conjugated (p/n 620-145-440) secondary antibody was used at 1:5000 in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) and imaged on the LiCor Odyssey imaging system. Molecular weight markers are in lane 1.

**References**

- Deng J et al. ULK1 inhibition overcomes compromised antigen presentation and restores antitumor immunity in LKB1-mutant lung cancer. *Nat Cancer*. (2021)

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.