Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 603-441-002

Chicken IgG (H&L) Antibody DyLight™ 488 Conjugated

Overview

Description:	Rabbit Anti-Chicken IgG (H&L) Antibody DyLight™ 488 Conjugated - 603-441-002
Item No.:	603-441-002
Size:	100 µg
Reactivity:	Chicken
Host Species:	Rabbit

Product Details

Background:	Anti-Chicken IgG DyLight Antibody generated in rabbit detects chicken IgY. 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 compliment 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.
Synonyms:	rabbit anti-Chicken IgG Antibody DyLight™ 488 Conjugation, rabbit anti-Chicken IgY DyLight™ 488 Conjugated Antibody
Host Species:	Rabbit
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 488
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	4.2

Target Details

Reactivity:	Chicken
Immunogen:	Chicken IgG, whole molecule

Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Chicken IgG coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities, conjugation to fluorochrome and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum, Chicken IgG and Chicken Serum. This antibody will react with heavy chains of Chicken IgG and Chicken IgY and with light chains of most Chicken immunoglobulins.

Application Details

Application Note:	The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation. This product 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FLISA:	>1:20,000
IF:	>1:5,000
WB:	>1:10,000

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

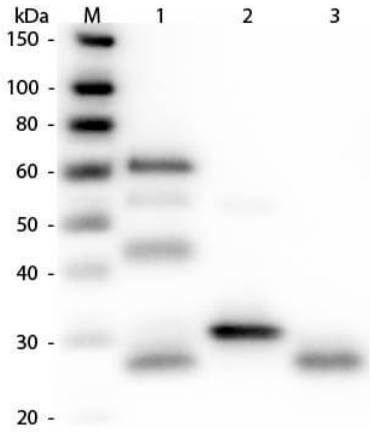
Shipping Condition:	Ambient

Storage Condition:	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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy
DyLight™ dyes can be used for multi-color immunofluorescence microscopy with uniform fluorescence intensity throughout the image. DyLight™ dyes are exceptionally bright and photostable and are optimized for microscopy and microarray detection methods. This image shows anti-histone detection using a DyLight™ 488 conjugate (green). Anti-Tubulin was detected using a DyLight™ 549 conjugate (red). Nuclei were counter-stained using DAPI (blue). The image was captured using an Axio Imager.Z1 (Zeiss Micro Imaging Inc).



Western Blot
Western Blot of Unconjugated Anti-Chicken IgG (H&L) (RABBIT) Antibody (p/n 603-4102). Lane M: 3 µl Molecular Ladder. Lane 1: Chicken IgG whole molecule (p/n 003-0102). Lane 2: Chicken IgG F(c) Fragment (p/n 003-0103). Lane 3: Chicken IgG Fab Fragment (p/n 003-0105). All samples were reduced. Load: 50 ng per lane. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Chicken IgG (H&L) (RABBIT) Antibody (p/n 603-4102) 1:3,000 for 60 min at RT. Secondary antibody: Anti-Rabbit IgG (GOAT) Peroxidase Conjugated Antibody (p/n 611-103-122) 1:40,000 in MB-070 for 30 min at RT. Predicted/Observed Size: 25 and 72 kDa for Chicken IgY, 25 kDa for F(c) and Fab. Chicken F(c) migrates slightly higher.

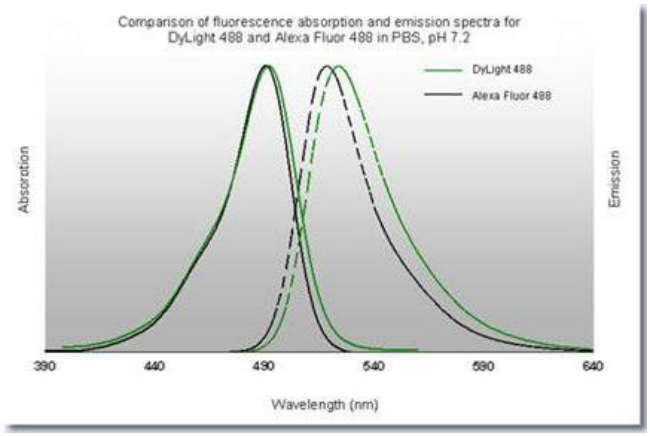


Diagram
DyLight™ 488 Fluorescence Spectra.

Emission	Color	DyLight™ Dye	Ex/Em (nm)	ε (M^{-1} cm^{-1})	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
Properties of DyLight™ Fluorescent Dyes.

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.